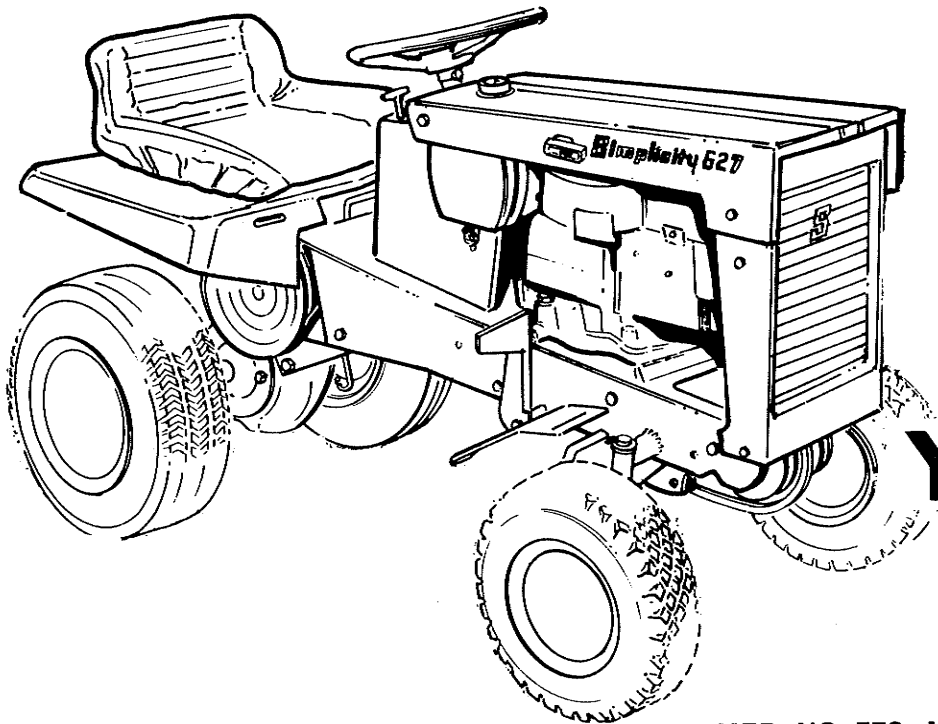


# ***Simplicity***<sup>®</sup>

## **OPERATOR'S MANUAL**



**YEOMAN  
627**

MFR. NO. 578 MANUAL START

MFR. NO. 579 ELECTRIC START

1970 PRODUCTION YEAR

**SIMPLICITY MANUFACTURING COMPANY**

**1628**



**CONVENIENT HAND-OPERATED CONTROLS.** Gearshift, throttle and choke lever and power take-off clutch lever are all functionally located near the foam-padded bucket seat.

**SIMPLE STEERING.** 3.3 to 1 ratio gear and sector steering for true geometric design. The front wheels follow different arcs when turning. Eliminates wheel marks and improves steering.

**BRIGGS & STRATTON 7 H.P. KOOL-BORE ENGINE** with compression-relieved Easy-Spin manual starting or key switch electric starting. Vertical crankshaft to allow protected drive system, low center of gravity and maximum power to implements.

**TRANSMISSION.** All spur gear, fully enclosed and lubricated. Three speeds forward, one reverse. Differential allows each rear wheel to rotate at required speed when turning.

**CHANNEL FRAME CONSTRUCTION** for durability and long life. Electrically welded, heavy gauge steel. Engine mounted on front axle, frame pivot point at rear axle. Short wheel base and large, low-pressure tires. Two power take-off points for front mounted and trailing implements.

**32 IN. ROTARY MOWER.** Front-axle mounted to automatically follow ground contour — Simplicity's patented anti-scalp mowing feature. Deck 4-1/2 in. deep above blades for even dispersal, 4 in. dia. rubber rollers at the rear. Two-pin attachment for easy removal. Cushioning belt drive absorbs shocks. Sealed rolling contact bearings on mower blade spindles.

**COMBINED CLUTCH AND BRAKE PEDAL.** Start and stop with smooth rocker action and no wheel skid. Improved Touch-o-matic clutch converts any transmission speed from zero to maximum for precise "inching" and turning speed. No need to "downshift" on turns.

## YEOMAN 627 TRACTOR

**Mfr's. Nos.**  
**578 579**  
**417**

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**MFR'S.  
NO.**

578	YEOMAN 627 — MANUAL START LESS MOWER
579	YEOMAN 627 — ELECTRIC START LESS MOWER
417	32 IN. ROTARY MOWER

# 1970 SIMPLICITY YEOMAN 627 TRACTOR SPECIFICATIONS

MODEL DESIGNATION	YEOMAN 627	Manual Starting	
	MFR'S. NO. 578	No Mower Included	
	YEOMAN 627	Electric Starting with Battery and Alternator	
	MFR'S. NO. 579	No Mower Included	
ENGINE	MAKE:	MODEL NO:	CYLINDERS: 1
	BRIGGS & STRATTON	170702 (Manual Start)	BORE: 3 Inches
		170705 (Electric Start)	STROKE: 2-3/8 Inches
		HORSEPOWER: 7	DISPLACEMENT: 16.79 Cu. In.
		CYCLES: 4	CRANKSHAFT: Vertical
	MANUAL STARTER	Easy-Spin Positive Rewind	
		Self-Lubricated Starter Clutch	
	ELECTRIC STARTER	TYPE: Key Ignition Switch	
		12 Volt - 18 Amp Hr. Battery with 7 Amp. Alternator	
	IGNITION	TYPE: High Tension Magneto, Patented Design	
		Dust-Proof Breaker Enclosure	
	GOVERNOR	TYPE: Adjustable, Mechanical, Running in Oil	
		RANGE: 1300 to 4000 R.P.M.	
	AIR CLEANER	Sealed Joint between Housing and Oiled Foam Element	
		ELEMENT: Reusable Polyurethane Foam	
TRANSMISSION	CRANKCASE	BREATHING: Ventilated through Carburetor	
		LUBRICATION: Gear Impeller System	
		OIL CAPACITY: 2-1/4 Pints	
	EXHAUST VALVE AND SEAT	Austenitic Steel with Sintered Alloy Inserts	
	FUEL TANK	MATERIAL: Epoxy Resin Sealed, Terne Coated Steel with Fuel Gage	
		CAPACITY: 1 Gallon	
	MUFFLER	Quiet, Compact, Low Back Pressure	
	TYPE	All Spur Gear, Running in Oil Bath	
	MATERIAL	GEARS: Carburized and Hardened	
		SHAFTS: Hardened and Ground	
CHASSIS		BEARINGS: Needle Type Roller	
	LUBRICATION	SAE 90 OIL. CAPACITY: 1 Quart	
	SPEEDS	Three Forward, One Reverse	
	SPEED RANGE	LOW: Up to 1.0 M.P.H.	
		SECOND: Up to 2.5 M.P.H.	
		HIGH: Up to 3.9 M.P.H.	
		REVERSE: Up to 3.9 M.P.H.	
	DIFFERENTIAL	All-Gear, Controlled Traction Type	
	FRAME	Inverted Channel, Electrically Welded, Heavy Gauge Steel	
		POWER TAKE-OFF POINTS: Front, Center and Rear	
		ENGINE MOUNTING: Above Front Axle	
		PIVOT POINT LOCATION: At Rear Axle	
	REAR WHEELS	PNEUMATIC TIRES INFLATION PRESSURE: 15 P.S.I.	
		TIRE SIZE: 16 x 6.50 x 8	
	FRONT WHEELS	PNEUMATIC INFLATION PRESSURE: 15 P.S.I.	
		TIRE SIZE: 4.10 x 3.50 x 6	
		BEARINGS: Sintered Iron, with Grease Fittings	



# 1970 SIMPLICITY YEOMAN 627 TRACTOR SPECIFICATIONS (Continued)

CHASSIS (Cont'd.)	SEAT	TYPE: Bucket Rubber Mounted	
		POSITIONS: 3	
		COVER: Deluxe Leatherette Covered Bonded Foam	
	TURNING RADIUS	INSIDE REAR TIRE: 20 Inches	
CONTROLS	STABILITY	40% Uphill and Sidehill Slope	
	STEERING	Steering Wheel Type	
		SYSTEM: 3.3-to-1 Ratio, Gear and Sector	
	CLUTCH AND BRAKE PEDAL	LOCATION: Right Front	
		CLUTCH: Soft Action, Touch-O-Matic V-Belt	
		BRAKE: External Band Type	
		Parking Brake Lock Standard Equipment	
	LOCATION	IMPLEMENT LIFT LEVER: Right Side	
		GEAR SELECTOR: Front Center of Seat	
		POWER TAKE-OFF LEVER: Left Side	
		THROTTLE AND CHOKE: Below Steering Wheel	
		PARKING BRAKE LOCK: Lower Left of Seat	
		MANUAL STARTER: Right Side of Engine Cover	
		ELECTRIC STARTER: Key at Right of Instrument Panel	
DIMENSIONS	OVERALL LENGTH	53-1/2 Inches	
	WIDTH	OVERALL WIDTH: 28 Inches (Less Attachments)	
		REAR WHEEL TREAD: 21-1/2 Inches	
	HEIGHT	TO TOP OF STEERING WHEEL: 33 Inches	
		TO TOP OF ENGINE COVER: 28-1/2 Inches	
	WHEEL BASE	36-1/2 Inches	
	WEIGHT	TRACTOR ONLY - MANUAL START:	281 Lbs.
		TRACTOR ONLY - ELECTRIC START:	301 Lbs.

## MFR'S. NO. 417 - 32 IN. ROTARY MOWER SPECIFICATIONS

ROTARY MOWER MFR'S. NO. 599	MOUNTING	2 Pins - Mower to Front Axle; 1 Pin to Lift Lever	
	CUTTING WIDTH	32 Inches	
	CUTTING HEIGHT	1-5/8 to 3-1/8 Inches, Adjustable	
	ADJUSTMENT	Single Handle Controls Front and Rear Height	
	CUTTING RATE	Up to 1.2 Acres Per Hour	
	NO. OF BLADES	Three	
	SPINDLES	Sealed Rolling Contact Bearing Mounted	
	DRIVE	Cushioning V-Belt, Idler Controlled	
	REAR SUPPORT	Full Width Rubber Rollers	
	HOUSING	MATERIAL: One-Piece Drawn Steel	
		LOWER EDGE OF HOUSING: 1/4 Inch Below Blade	
		LOWER EDGE OF DISCHARGE OPENING: 1/4 Inch Above Blade	
	DIMENSIONS	OVERALL LENGTH: 23-1/2 Inches	
		OVERALL WIDTH: 35-7/8 Inches	
		SHIPPING WEIGHT: 90 Lbs.	

## ATTACHMENTS AND ACCESSORIES

	MFR'S. NO.	
ELECTRICAL	530	Electric Starting Kit – Includes 18 AMP. HR. 12 V. Battery, Bendix Starter and Trickle Charger
	618	Front Light Kit
LAWN CARE EQUIPMENT	173	Mulcher for 32 Inch Rotary Mower
	085	Dump Cart – 1000 Lbs. Capacity
	625	Dump Cart – 400 Lbs. Capacity
	227	36 Inch Lawn Roller
	627	30 Inch Parker Trailing Lawn Sweeper
	629	26 Inch Trailing Lawn Revitalizer
	506	Vacuum Collector
	445	Adapter, Vacuum Collector – for 32 Inch Mower
	447	Roving Nozzle for Vacuum Collector
	531	Cart Cover, High Capacity (Requires No. 085)
	624	Cart Cover, Low Profile (Requires No. 085)
SNOW REMOVAL EQUIPMENT	477	32 Inch Rotary Snow Thrower
	299	42 Inch Snow Plow Blade
	586	Engine Winterizing Kit (Included with Snow Thrower) (Not Included with Plow Blade)
	582	Traction Tire and Wheel Set
	341	Set of Tire Chains
EARTH WORKING EQUIPMENT	628	30 Inch Rotary Tiller
	298	40 Inch Grader Blade
	299	42 Inch Dozer Blade
OTHER ATTACHMENTS	466	Front Weight
	300	Rear Weight
	045	Auxiliary Weight (Fits on No. 300)
	449	Rear Wheel Weights
	462	Set of Four Hub Caps
	616	Pair of Front Hub Caps

## PROTECT YOURSELF AND OTHERS

In addition to the basic safety rules appearing on the inside front cover, follow these safety tips:

1. Before mowing or using the vacuum collector, make sure the lawn is clear of sticks, stones, wire and other debris which could be thrown by the mower blade.

2. Always set the transmission lever in "NEUTRAL" and disengage the power take-off drive before starting the engine. (See "Controls".)

3. Before mowing the first time, check the mower height setting. Because of variations in hitch positions, the cutting height must be properly adjusted. (See "Cutting Height" under "Adjustments".)

4. Whenever you stop mowing or vacuum collecting, either to remove obstacles or make adjustments, stop and think before you dismount. **DISENGAGE THE MOWER DRIVE, THEN SHUT OFF THE ENGINE AND SHIFT INTO NEUTRAL.** If you are on a driveway or on grass already cut, the mower blades will continue spinning for a short time. To dismount, place your feet well away from the mower housing.

5. Whenever you park the tractor, lock the parking brake lever as described in "OPERATION." On electric start models, remove the ignition key.

6. Before operating for the first time, study this entire owners manual.

## SEAT

The seat support has three sets of holes to allow repositioning the seat from front to rear as desired. Remove the lower seat pan mounting nuts and lockwashers and relocate the seat mounting bolts in the alternate set of holes. Retighten nuts securely.

## CONTROLS

1. **THROTTLE LEVER:** Move lever forward to "CHOKE" position when starting, use the 3/4 to full speed range for operating. Pull back to "STOP" position to shut off the engine.

2. **IGNITION SWITCH** (Electric start models): Turn the key clockwise and hold it to start the engine, then release as soon as it starts.

## NOTE

*Electric starting model 579 has the manual starter built in for emergency use. In case of battery failure or damage, follow the manual procedure outlined in "STARTING."*

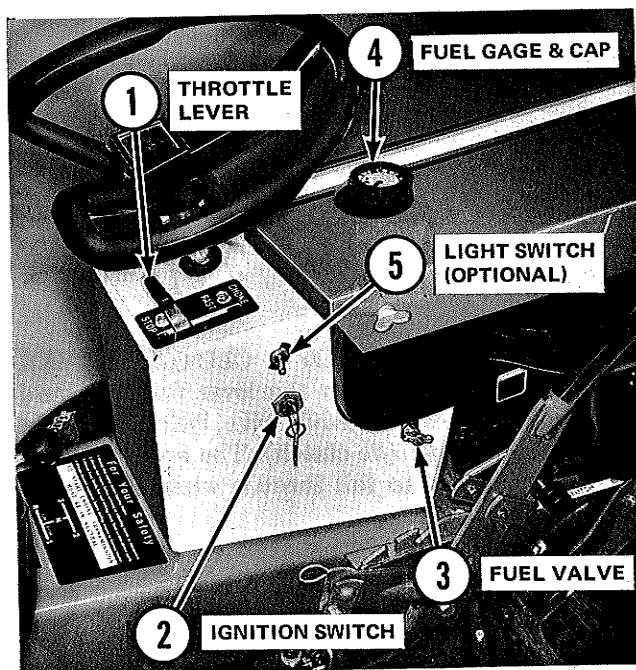
3. **FUEL VALVE:** Turn counterclockwise to open, clockwise to close. The valve can be left open without flooding or leakage.

4. **FUEL GAGE AND FILLER CAP:** The gage measures the level of fuel in the tank. Turn the cap counterclockwise to remove for refueling.

5. **LIGHT SWITCH** (Optional): Flip toggle lever up to turn on lights.

## NOTE

*The lamps will not light unless the ignition key is turned to "ON".*



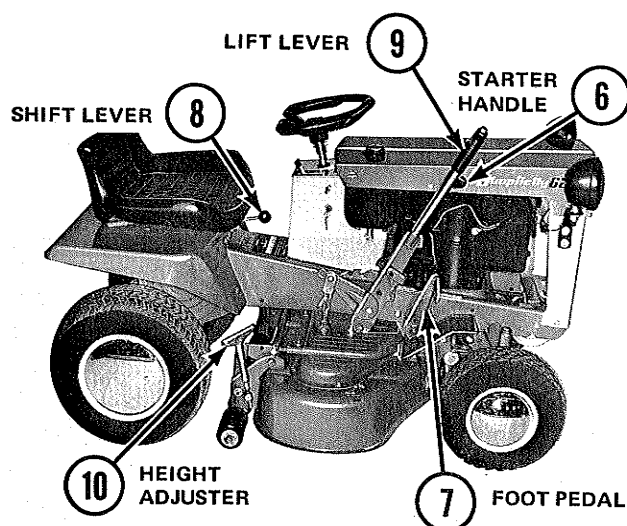
6. **STARTER HANDLE** (manual start models): Grasp the handle and pull sharply to start the engine. (See "STARTING".) Return the handle to the hood by hand. **DO NOT RELEASE THE STARTER HANDLE WITH THE ROPE EXTENDED.**

7. **CLUTCH AND BRAKE FOOT PEDAL:** Push the pedal **DOWN** (depress) to disengage the tractor drive clutch and apply brake simultaneously. Always depress the pedal to stop the tractor before shifting gears.

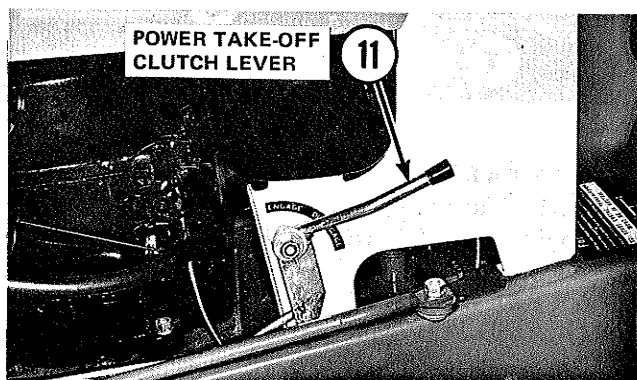
8. **GEAR SHIFT LEVER:** Depress the foot pedal (Item 7) and position the shift lever in the desired position according to the printed shift diagram on the panel. **DO NOT** try to shift gears unless the foot pedal is depressed (tractor stopped).

9. **LIFT LEVER:** The lift lever is used for lifting the mower or other implement out of operating position for transport. (See "OPERATION" and "ATTACHMENTS".)

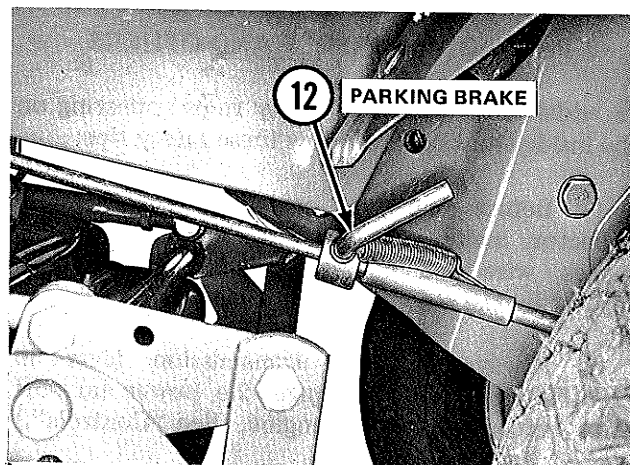
10. **MOWER HEIGHT ADJUSTER:** Turn the crank handle **CLOCKWISE** (viewed from top) to **RAISE** the mower, **COUNTERCLOCKWISE** to **LOWER** it.



11. **POWER TAKE-OFF CLUTCH LEVER** (Implement clutch): Push the lever fully forward to engage the power take-off drive. Pull it back and down to disengage (de-clutch). The engine should be running at 3/4 to full throttle when the power take-off is engaged.



12. **PARKING BRAKE LOCK:** Depress and hold the foot pedal, slide the lever and collar to the rear and lock. (See "OPERATION".)



## BEFORE STARTING

### NOTE

*The tractor is shipped with all tires inflated to 25 psi. Before operating the first time, tire pressure must be reduced as follows:*

*Front Tires: 15 psi*

*Rear Tires: 15 psi*

Before attempting to start the engine, read the engine owner's manual thoroughly. Be sure to have on hand sufficient quantities of clean, fresh "Regular" grade gasoline, SAE 30 grade MS motor oil (for summer use) and SAE 90 transmission oil. For oil and fuel capacities, see "Specifications".

Pay attention to "Service Designation" stamped on the top of each can of oil you intend using in your tractor engine. Use oil labeled MS (Motor Severe), but do *not* use ML or MM labels as they do not contain sufficient additives for proper protection. Labels DL and DM may be used also; however, do *not* use a DS label oil as it is too severe in detergent quality for this application. Be sure to use a premium grade oil and change at least every 24 hours of operation.

### NOTE

*The wide variety of Simplicity attachments offered allows use of the tractor all year round. It is important to service the engine for each change of season. Engine crankcase oil recommendations are as follows:*

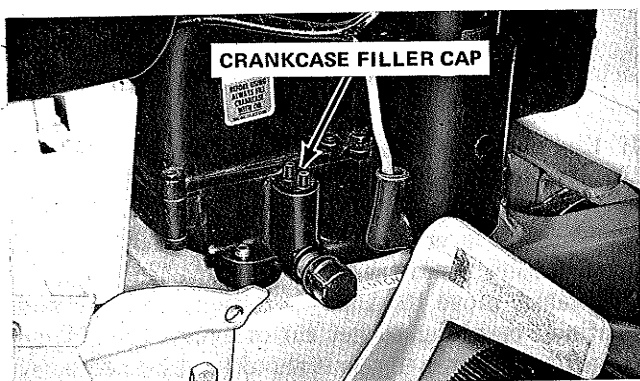
**SUMMER:** Above 40°F. use SAE 30 grade MS motor oil. If not available use SAE 10W-30.

**WINTER:** Below 40°F. Use SAE 5W-20 grade MS motor oil. If not available, use SAE 10W, but only above 10°F.

## NOTE

*Remember that fuel refiners change gasoline volatility according to season. Use fresh gasoline for better performance and easy starting.*

1. Remove the engine crankcase filler plug by turning counterclockwise. The plug is located at the right side of the engine. Fill the crankcase with SAE 30 grade MS oil until level with the top of the filler neck. Reinstall the filler cap securely. **CHECK THE OIL LEVEL EVERY TIME FUEL IS ADDED.**

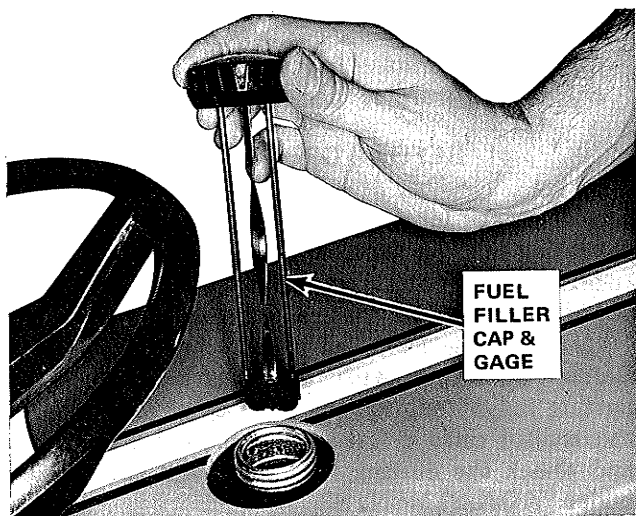


2. Remove the fuel tank filler cap, pulling straight up until the gage float clears the engine cover. Fill the tank completely with clean, fresh "Regular" grade gasoline.

**DO NOT MIX OIL WITH GASOLINE.**

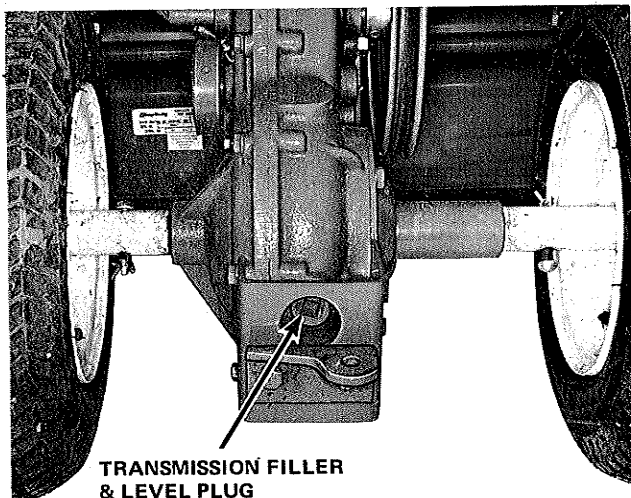
## CAUTION

**GASOLINE IS HIGHLY INFLAMMABLE. AVOID OVERFILLING AND WIPE UP ANY SPILLED FUEL. ALLOW NO OPEN FLAME, SMOKING OR MATCHES NEAR THE AREA WHEN REFUELING.**



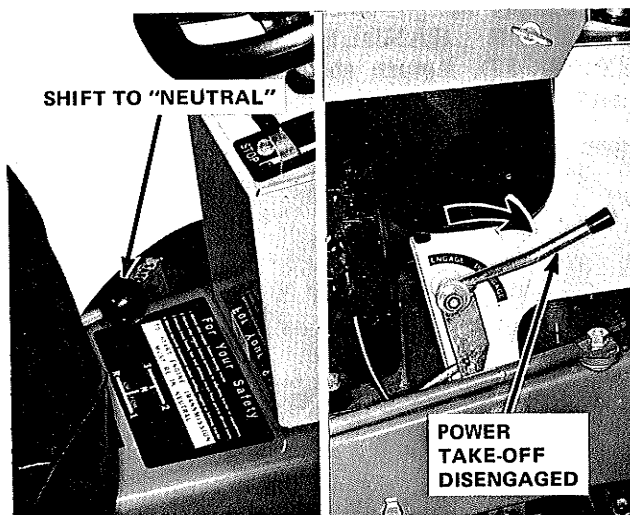
Replace the filler cap securely. Store gasoline in small quantities - prolonged storage produces harmful gum and deposits. If it is necessary to store gasoline for prolonged periods, add STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. (See "OFF-SEASON STORAGE".)

3. The transmission housing is filled with oil at the factory but the level should be checked before running the first time. Remove the filler and level plug at the rear of the housing. The oil should be level with the threaded hole. Replenish if needed with SAE 90 transmission oil.



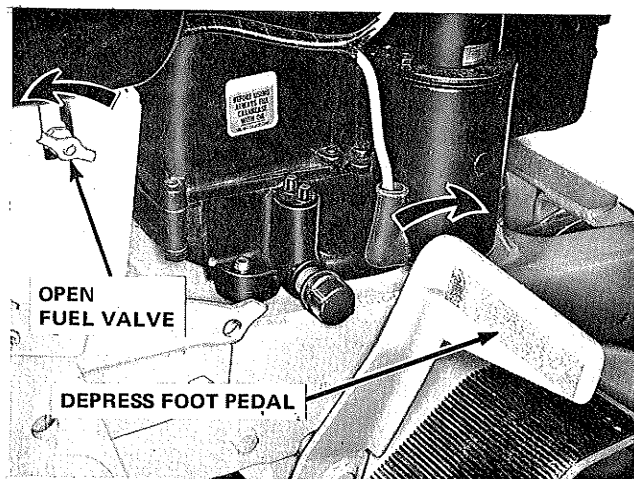
## CAUTION

**BEFORE STARTING THE TRACTOR, PLACE TRANSMISSION SHIFT LEVER IN NEUTRAL POSITION AND DISENGAGE THE POWER TAKE-OFF DRIVE BY MOVING THE CLUTCH LEVER TO THE REAR AND DOWN.**

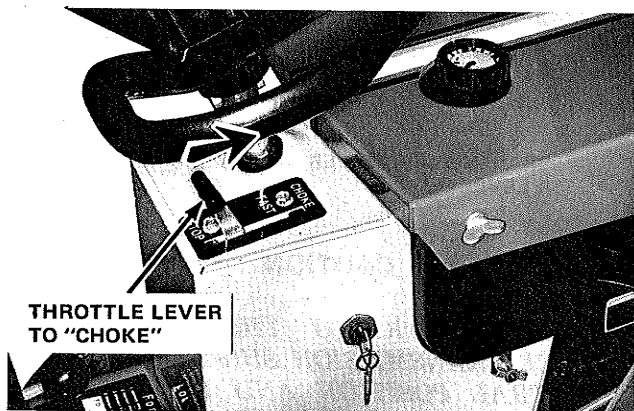


## STARTING

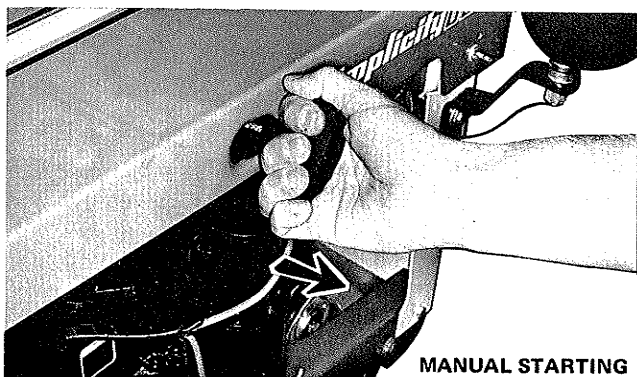
1. Depress the clutch-brake pedal all the way and hold it down. Open the fuel valve by turning counterclockwise all the way.



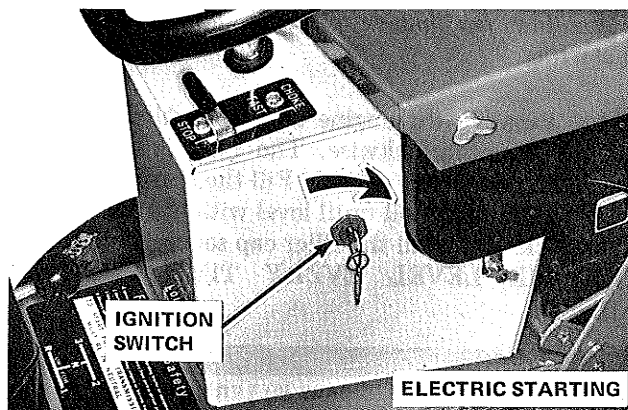
2. Move the throttle lever forward to "CHOKE" position.



3. **MANUAL START MODELS:** Grasp the recoil starter handle firmly in your right hand and pull sharply straight out. **DO NOT RELEASE THE STARTER HANDLE WITH THE ROPE EXTENDED.** Return the handle to the hood by hand.



**ELECTRIC START MODELS:** Turn the ignition key clockwise and hold it until the engine starts, then release it.



If the engine starts promptly, slowly move the throttle lever to "FAST" as it warms up. If the engine fails to start on the first or second try, move the throttle lever from "CHOKE" to "FAST" to avoid flooding and try starting again. If the engine is flooded, move the throttle lever to "STOP" and continue cranking to get rid of excess fuel. When restarting a warm engine it should not be necessary to use "CHOKE".

**STOPPING:** To stop the engine or to park the tractor, keep the transmission in gear, depress the foot pedal all the way to apply brake and move the throttle lever to "STOP" position. On electric start models, turn the ignition key OFF (counterclockwise). Hold the pedal down until the engine stops completely. **REMOVE THE KEY EVERY TIME YOU LEAVE THE TRACTOR.**

## NOTE

*If the engine has been run for an extended period under heavy load, do not shut it off too suddenly. Move the throttle lever to "SLOW" position and allow the engine to idle for a few minutes to gradually reduce the engine temperature, then shut it off.*

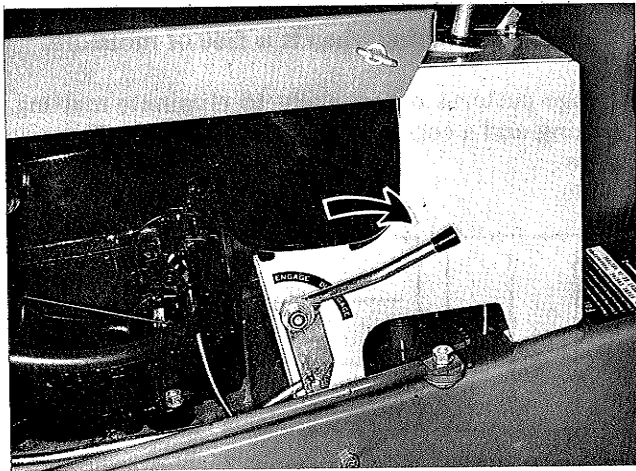
## BEFORE OPERATING

The tractor is lubricated at the factory, but before operating the first time, all grease fittings and other lubrication points should be serviced. See "MAINTENANCE" for instructions.

Before operating with the rotary mower, the cutting height adjustment must be checked. Move the tractor onto a flat surface such as a driveway and check the cutting height settings as outlined under "ADJUSTMENTS".



If the mower or other implement is attached, raise the implement. (See "MOWER OPERATION" or "ATTACHMENTS".) Be sure the power take-off clutch lever is *DISENGAGED* (pulled back and down) before driving the tractor the first time.

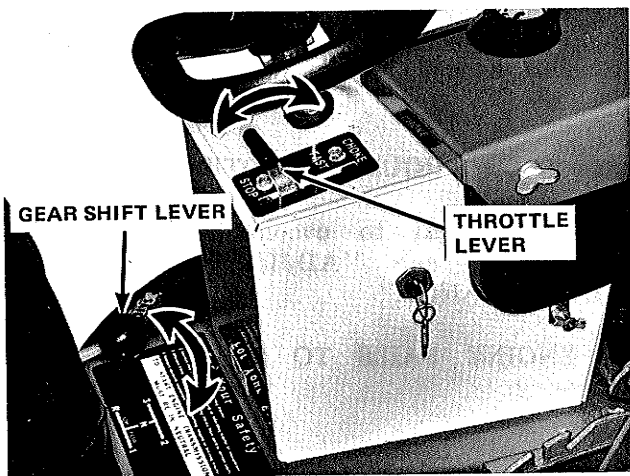


### OPERATION

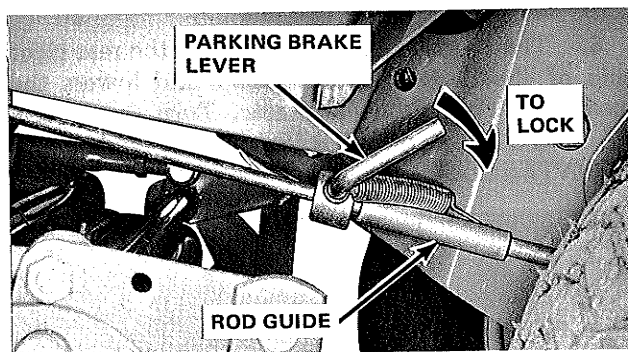
**SHIFTING:** Forward or reverse travel is controlled by the position of the gear shift lever. With the foot pedal depressed, move the shift lever into the desired 1st, 2nd, 3rd or reverse position. Slowly release the foot lever and move off, regulating speed by the position of the throttle lever.

### CAUTION

**ALWAYS DEPRESS THE FOOT PEDAL FULLY AND STOP THE TRACTOR BEFORE SHIFTING GEARS.**



**PARKING BRAKE:** To lock the brake for parking, hold the foot pedal depressed. Slide the parking brake lever and collar to the rear against the rod guide. Turn the lever clockwise (to rear) until tight. To release the brake, turn the lever counterclockwise (to front) until brake releases.



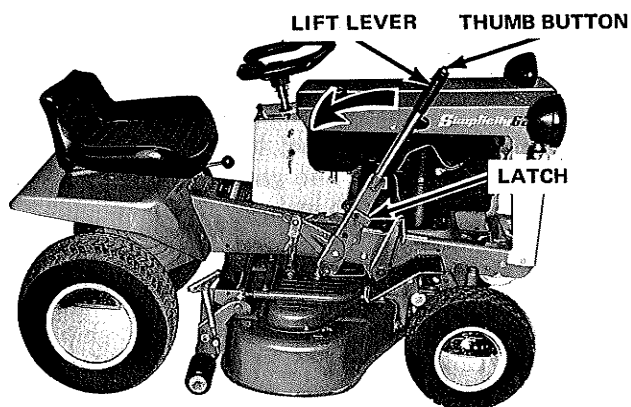
### MOWER OPERATION

### CAUTION

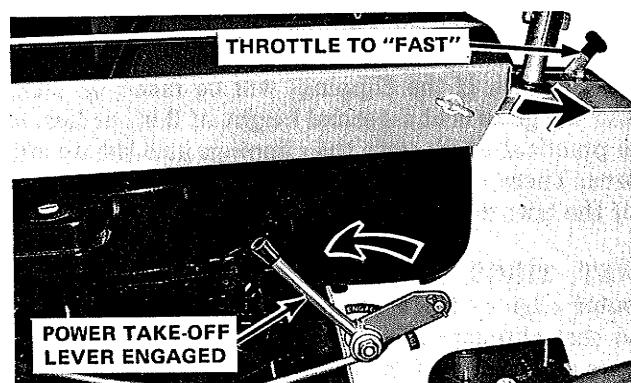
**NEVER OPERATE THE MOWER WITHOUT THE DEFLECTOR ADAPTER IN PLACE.**

**INSTALLATION:** Complete instructions on installation, removal, cutting height settings and leveling are included under "ADJUSTMENTS" page 11 and "MAINTENANCE" page 14.

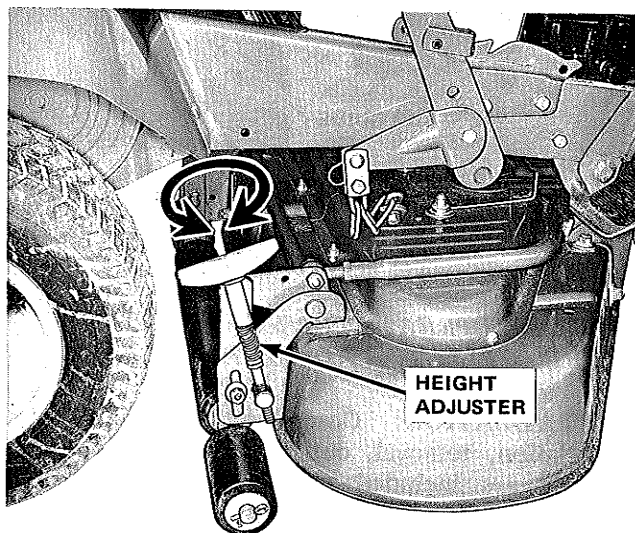
1. Grasp the lift lever handle, depress the thumb button to free the latch and move the lever back, lowering the mower to operating position.



2. Move the throttle to "FAST" to absorb the additional load. Engage the mower blade drive by pushing the power take-off clutch lever **FORWARD**.



3. The height adjusting handle at the rear right side of the mower housing raises and lowers the mower at both front and rear. Turn the handle *CLOCKWISE* to *RAISE* the blade and *COUNTERCLOCKWISE* to *LOWER* it.



4. Most lawns should be mowed to keep the height of the grass approximately 2 to 3 in. high. Best results are obtained by cutting often and not too short. To keep a green lawn, **NEVER** mow more than one-third off the height of the grass or a maximum of 1 in. in one mowing. For extremely tall grass, set the cutting height at **MAXIMUM** for the first mowing, then reset to the desired height and mow again. Allow the grass to grow to 3 in., then cut off only the top inch.

### MOWING PATTERN

For the first use of the mower, choose a smooth, level area. Cut long, straight strips overlapping slightly. After getting used to the operation, proceed to inclines or rough ground.

Guide the right side of the mower along trees, posts or other obstacles and follow the contour as closely as possible.

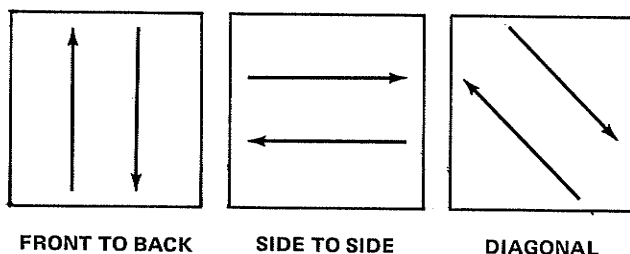
**DISPERSAL:** If the clippings are to remain on the lawn, mow with the discharge side toward the area already cut. If the clippings will be raked up later and the grass is at a normal height of 3 in. or less, it is practical to disperse the clippings into the un-cut area. There they will be concentrated in the center of the lawn for minimum raking.

**WET, THICK OR HEAVY GRASS:** Start at the outer edge of the area and mow counterclockwise so that clippings are always deposited on cut grass. Less engine power is required and a more even cut free of streaks will result.

**HEIGHT SETTING:** On thick or springy grass, do not set the cutting height too low. The wheels may sink into the lawn, resulting in too short a cut. (See "ADJUSTMENTS".)

For best appearance, new grass should be cut in the afternoon or evening when it is free of moisture.

Change patterns occasionally to eliminate matting, graining and a corrugated appearance. See diagrams below.



A trailing lawn sweeper used for collecting clippings is available from your Simplicity dealer. (See "ATTACHMENTS".) Remember to let the clippings dry out for several hours before using the sweeper.

### CAUTION

*IF YOU FEEL SEVERE VIBRATION WHEN MOWING, THE BLADES COULD BE UNBALANCED. HAVE THEM BALANCED BEFORE FURTHER USE. (SEE "MAINTENANCE".)*

A leaf mulcher attachment (Mfr's. No. 173) is available as an accessory from your Simplicity dealer.

### TROUBLE SHOOTING

For instructions to overcome the following problems, see "ADJUSTMENTS" and "MAINTENANCE."

**IF ENGINE FAILS TO START**, check the following:

1. Fuel in tank.
2. On electric start models, check the battery charge, connections and wiring to the switch (page 16).
3. Throttle lever must be in "CHOKE" position or in "FAST" position if engine appears to be flooded.



4. Shift lever must be in "NEUTRAL" position and foot pedal depressed.

5. Power take-off clutch lever must be to rear in "DISENGAGED" position.

6. Spark plug cable must be securely connected to spark plug.

IF BELT SLIPPAGE OCCURS, check the following:

1. Belts may be stretched or excessively worn.
2. Pulleys may be greasy or oily.
3. Insufficient belt tension due to a broken or worn tension spring.
4. If the mower drive belt jumps off the pulley when clutch is engaged or disengaged, there may be too much belt slack or the mower idler pulley belt guards are out of position.

IF A BELT BREAKS, check the following:

1. Look for sharp edges or rough spots on pulleys.
2. Pulleys may be misaligned.
3. Belt tension may be too tight.

IF HANDLING IS DIFFICULT, check the following:

1. Controls or drive systems may be out of adjustment.
2. Tires under-inflated. (See "BEFORE STARTING," page 6.)
3. Wheels spinning on slopes. Wet grass is very slippery - mow in the late afternoon after it has dried. Wheel weights may be added to provide additional traction. (See "ATTACHMENTS".)

IF AN UNEVEN CUT RESULTS, check the following:

1. Mower may not be adjusted properly.
2. Mower housing may be bent or damaged.
3. Blade arbor tube may be bent.
4. Uneven cut from side to side may result from mower not being properly leveled. (See "ADJUSTMENTS" at right.)

IF A POOR OR ROUGH LOOKING CUT RESULTS, check the following:

1. Blades may need sharpening.
2. Grass may be too high or gone to seed.
3. Drive belt may be slipping.
4. Mower may be out of adjustment.
5. Engine speed must be at 3/4 to full throttle.

IF VIBRATION OCCURS, check the following:

1. Arbor shaft or tube (or both) may be bent.
2. Blade may be unbalanced.
3. Drive pulley may be bent or misaligned.

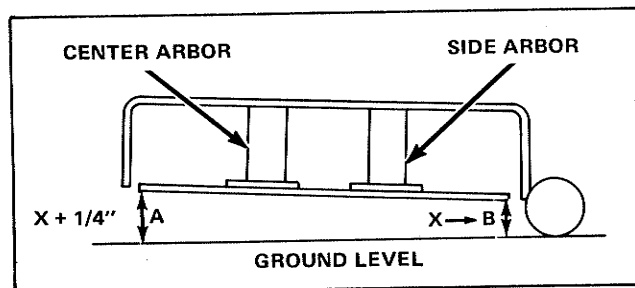
## ADJUSTMENTS

CUTTING HEIGHT: Move the tractor onto a flat, smooth surface.

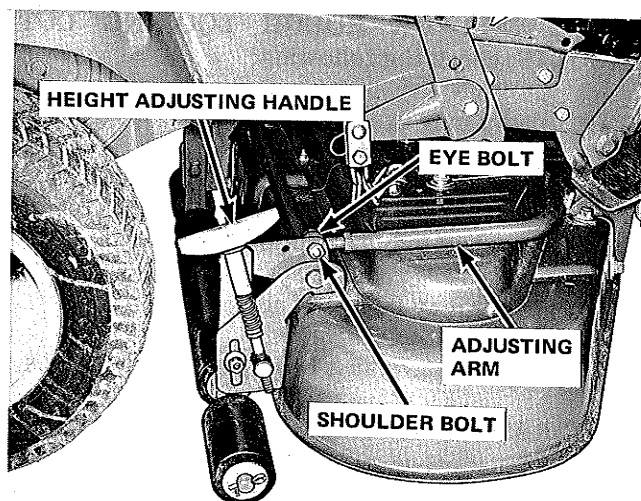
## CAUTION

*BE SURE THE ENGINE IS STOPPED, TRANSMISSION IS IN NEUTRAL AND POWER TAKE-OFF DRIVE IS DISENGAGED (CLUTCH LEVER TO REAR). BLOCK THE WHEELS, FRONT AND REAR, TO PREVENT ROLLING WHILE WORKING ON BLADES.*

1. Rotate all three blades so that the tips are pointed directly toward front and rear.
2. Use the height adjusting handle to obtain a height of 2 inches at point (B). Then rotate all blades so that the tips just measured point to the front.

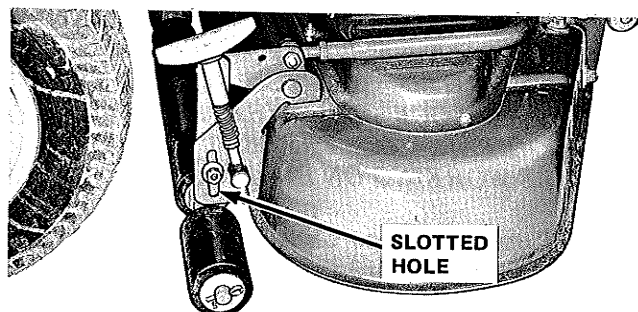


3. Remove the shoulder bolts which hold the adjusting rod eyebolts to the roller brackets. Note that the shoulder bolt heads are toward the inside, the nuts on the outside. Adjust the eyebolts to obtain a height of 2-1/8 to 2-1/4 in. at point (A).

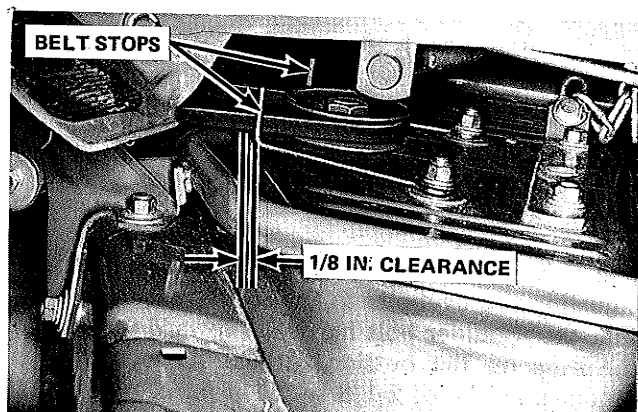


To raise the front of the mower, turn the two eyebolts **IN, CLOCKWISE** on the adjusting arms. To lower the front of the mower, turn the eyebolts **OUT, COUNTERCLOCKWISE**. After obtaining the correct height at point (A), be sure to recheck point (B).

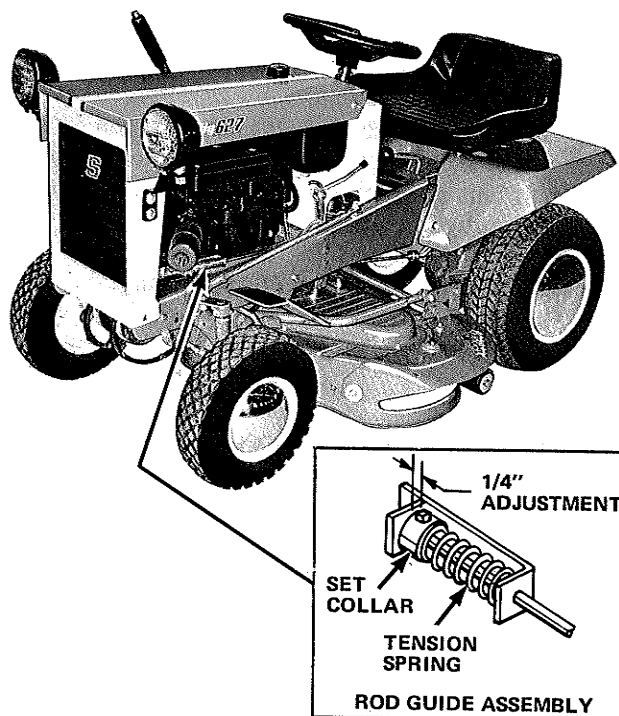
4. Note the slotted holes in the rear housing brackets. Side-to-side level is obtained by loosening the nuts to raise or lower the side edges of housing. Retighten the nuts securely.



**BELT STOPS:** Position the mower belt stops by loosening the stop mounting nuts. Move the fingers to within  $\frac{1}{8}$  in. of the belt on both sides with the power take-off **ENGAGED**. Stops must not touch the belt when running.



**POWER TAKE-OFF ROD GUIDE ADJUSTMENT:** Engage the power take-off clutch lever (push forward). Check the clearance between the set collar and the end of the bracket. This should normally be  $\frac{1}{4}$  in. At this setting the idler pulley should be snugly against the drive belt. If more tension is required due to belt stretch, **RELEASE** the lever, loosen the collar setscrew and slide the collar back on the rod slightly. Retighten the setscrew securely. Engage the lever and check the belt tension. Only enough tension to drive the implement being used is necessary. Any more will only cause premature failure of belts and pulley bearings.



**CLUTCH AND BRAKE PEDAL RODS:** The correct adjustment of the combined clutch and brake pedal linkage is vital to smooth machine motion and braking. For access to the underside of the tractor, tilt it to the vertical position as described under "MAINTENANCE".

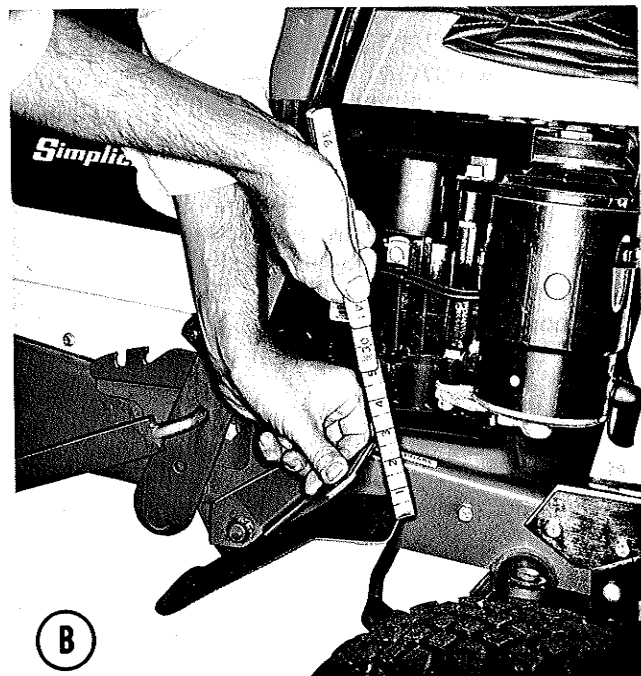
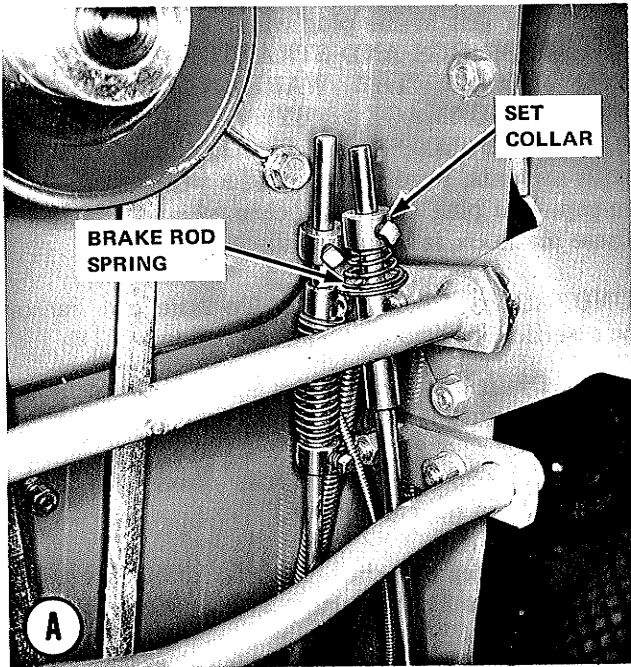
#### NOTE

**BE SURE TO DRAIN FUEL AND REMOVE THE BATTERY BEFORE TILTING THE TRACTOR.**

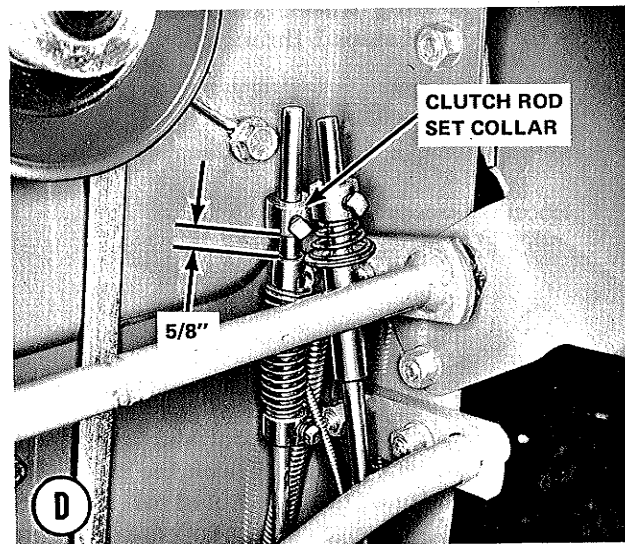
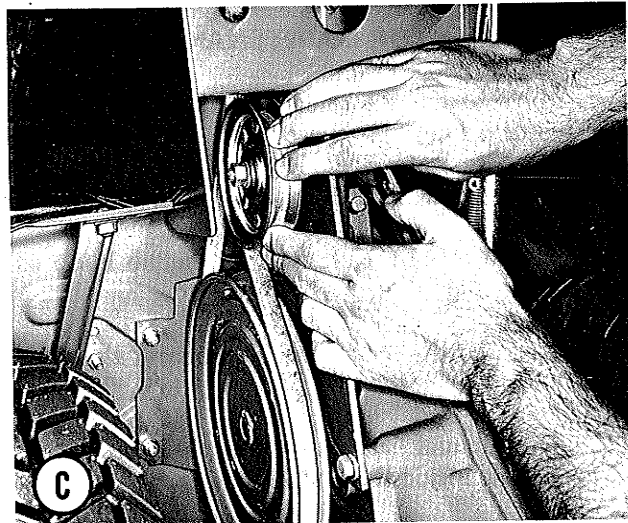
The clutch and brake adjustments are made in four steps, as follows:

1. Depress the foot pedal and check the contact of the brake band with the brake drum. The band must conform fully to the curvature of the drum.

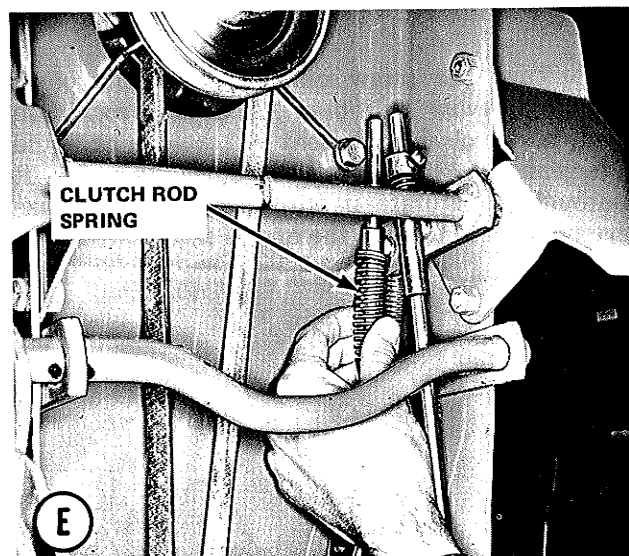
2. With the foot pedal released (UP), secure the brake rod set collar against the tapered coil spring. Be sure to position the collar as shown in Figure A so that the spring is NOT compressed. Then depress the foot pedal all the way down. It should stop 2-1/2 inches from the footrest edge as shown in Figure B.



3. With the foot pedal released (UP) and the clutch idler pulley pressed firmly against the belt (Figure C), measure the distance between the clutch rod set collar and the end of the rod guide (Figure D). This dimension must be 5/8 inches as shown.



4. With the set collar adjusted correctly on the clutch rod, depress the foot pedal and check to see that the clutch rod tension spring is free to rotate on the rod (Figure E).

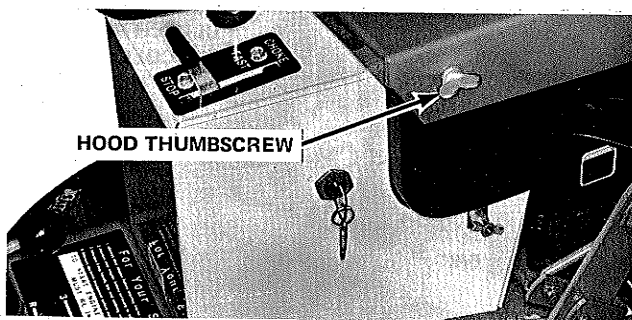


## TRACTOR MAINTENANCE

Regularly scheduled lubrication and inspection of the tractor should be done with all implements removed. (See "MOWER REMOVAL", page 15, and "ATTACHMENTS".)

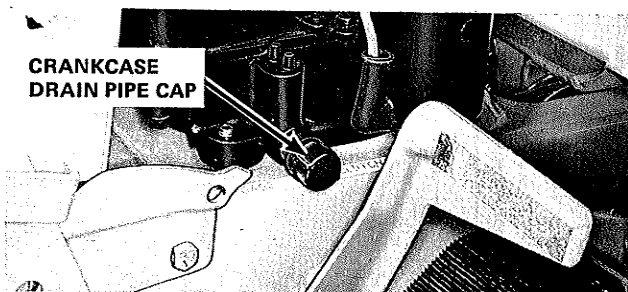
**HOOD REMOVAL:** Remove the engine hood as follows:

1. Remove the four thumb screws at the sides of the hood.
2. On manual start models, push the recoil starter handle inside the hood opening.
3. Remove the hood by lifting up and forward to clear the steering wheel. To install the hood, reverse the order of steps 1 through 3.



**ENGINE:** Follow the regular procedures outlined in the engine owner's manual. Check the crankcase oil level every time fuel is added or every 5 operating hours. Change the crankcase oil and service the air cleaner every 20 operating hours.

1. The crankcase should be drained when the engine is warm. Remove the drain pipe cap at the side of the engine to drain. Replace the cap securely and fill the crankcase with clean SAE 30 grade MS motor oil.
2. Turn the screw on the air cleaner cover counterclockwise to loosen. Remove cover. Wash the foam air cleaner element in kerosene or liquid detergent, squeezing several times and dry it thoroughly. Saturate it with engine oil, squeeze several times to remove the excess and reinstall.



3. Every 20 operating hours, thoroughly clean all clippings, dirt and chaff from the cooling fins on the cylinder and head to prevent damage from overheating.

4. Clean and re-gap the spark plug every 100 operating hours. Gap to .030 in. DO NOT clean the plug by sandblasting - this process often leaves a residue of grit in the plug which can cause engine damage. BRIGGS AND STRATTON CORP. WILL NOT HONOR THE WARRANTY ON ANY ENGINE DAMAGED BY GRIT FROM A SANDBLASTED SPARK PLUG. Clean the plug with solvents, scraping or using a wire brush, then re-gap. If a plug cannot be cleaned sufficiently by these methods, it should be discarded.

**UNDERSIDE INSPECTION:** To raise the tractor to a vertical position, proceed as follows:

1. Drain the fuel tank by siphoning or running the engine until it stops.
2. Remove the air cleaner cover and filter element from the carburetor.
3. On electric start models, disconnect the wiring harness at the battery and carefully remove the battery.

### CAUTION

**BATTERY MUST BE REMOVED BEFORE THE TRACTOR IS TIPPED UP OR LEAKING ELECTROLYTE MAY CAUSE DAMAGE.**

4. Place the transmission shift lever in "LO" gear to prevent the rear wheels from turning. Grasp the front hitch of the tractor and raise it until the tractor rests on the back edge of the seat level with the floor. It is possible for one man to raise the tractor but it is easier and safer for two men to do it.

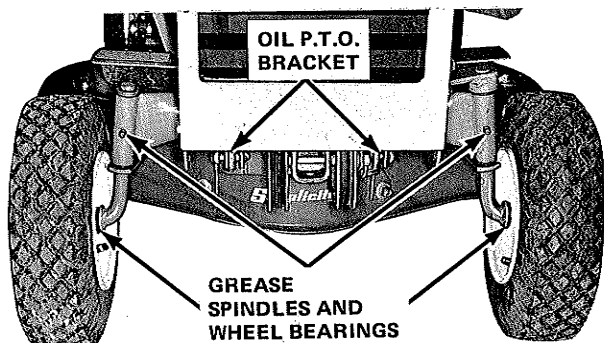
Brake and clutch adjustment, lubrication, belt inspection and other maintenance procedures are most easily done with the tractor in the vertical position.

**GREASE FITTINGS:** There are five grease fittings on the tractor, located as shown. Grease all fittings every 15 to 20 operating hours. Use a Lithium-based general purpose automotive grease. Remove all dirt, grit and paint from the fittings before application.

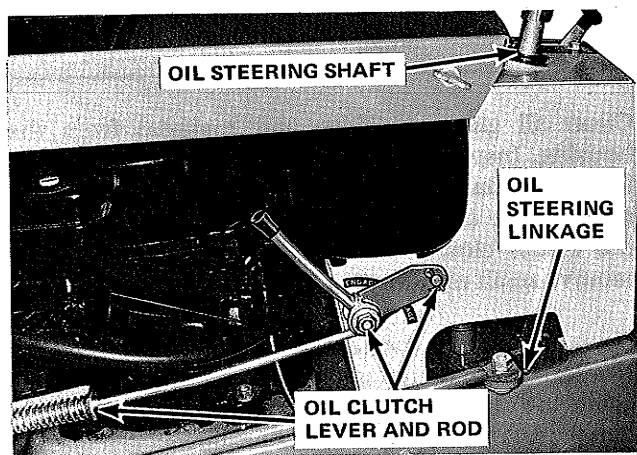
Apply light engine oil at the points indicated every 20 operating hours. Do not allow oil to drip onto belts or pulley grooves.

If oil has been spilled on any of the belts, use Energine or a similar cleaning fluid on a rag to clean it. An alternate method is to sprinkle a handful of Drizit or Kitty-Litter compound on the belt while running. **KEEP CLOTHING AND HANDS AWAY FROM THE BELT.**

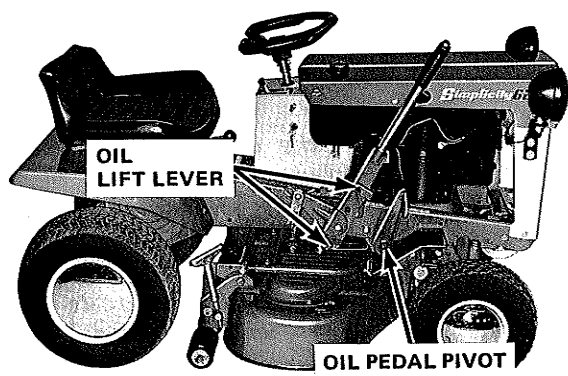
1. Grease both front wheel hub fittings and the fittings on the front wheel spindles. Apply oil to the pivot points of the power take-off pulley bracket.



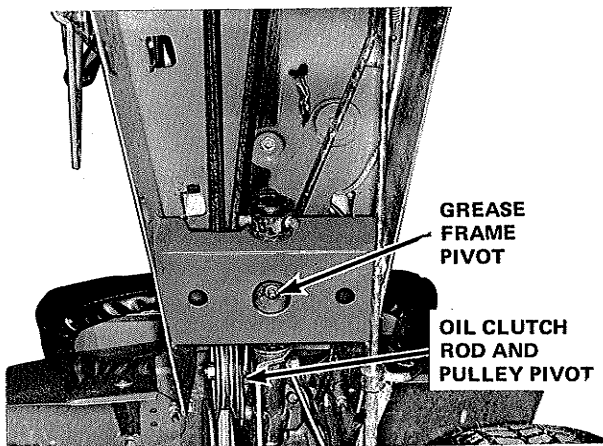
2. Apply oil to the steering gear and sector pivot points, the clutch lever pivot, the clutch rod at the rod guide and the steering shaft.



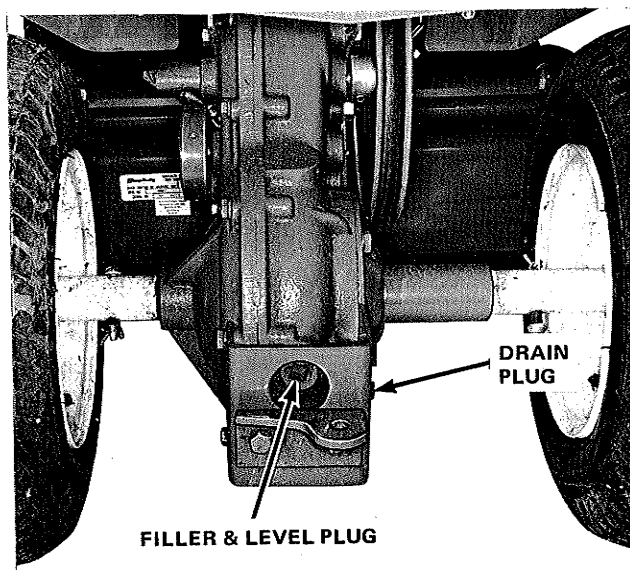
3. Apply oil to the pedal pivot and the lift lever pivot point. Oil the lever latch and release rod.



4. Grease the frame pivot fitting. Apply oil to the clutch rod pivot and the idler pulley bracket pivot.



**TRANSMISSION:** Check the filler and drain plugs occasionally for tightness. Unless the transmission is disassembled or the oil seals leak, the lubricant need not be replaced. Allow the tractor to stand about 10 minutes before checking the oil level. Remove the filler and level plug. Fill the housing with SAE 90 grade MS oil to the level of the plug threads. Reinstall the plug securely. The drain plug is located at the right lower side of the housing.



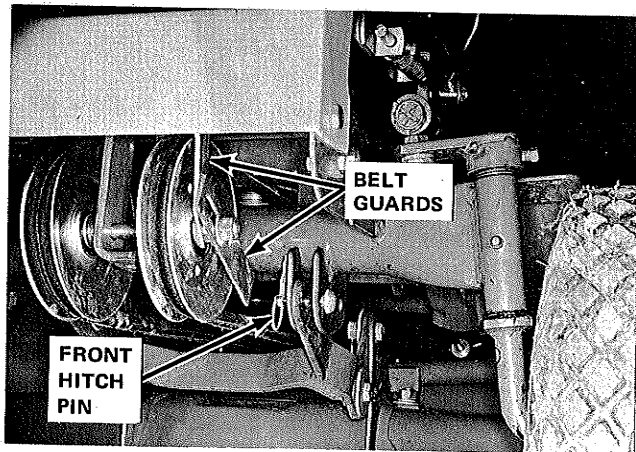
## MOWER MAINTENANCE

**REMOVAL:** Remove and install the rotary mower as follows:

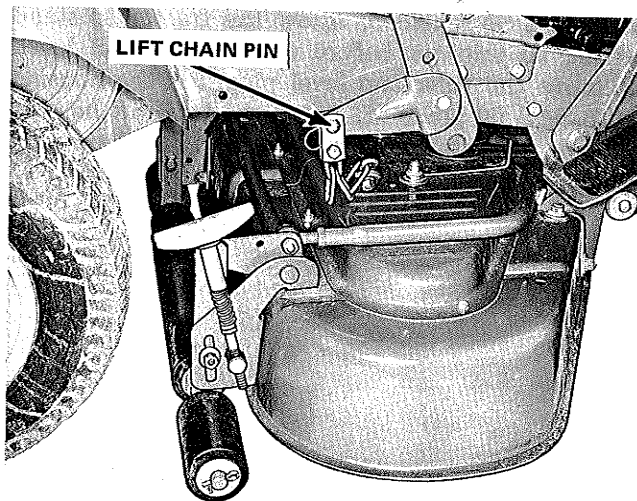
1. Declutch the drive by pulling the power take-off clutch lever back and down.
2. Slip the power take-off belt off the lower engine pulley.



3. Loosen the power take-off left pulley mounting bolt enough to move the belt guards aside to allow disengaging the belt from the pulleys.



4. Disconnect the rear lift chain by removing the spring clip and pin from the lift lever.



5. Remove the spring clips and pins at the front hitch to lower the mower. Turn the steering wheel to cock the front wheels all the way to the left. Pull the mower OUT from under the tractor from the right side.

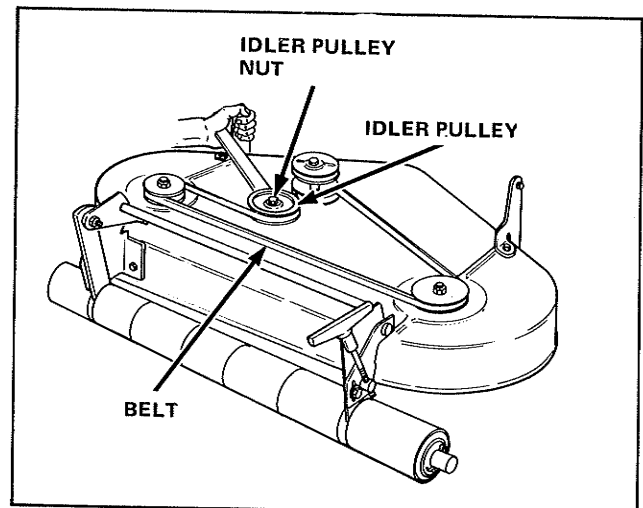
To install the mower, attach the front pins first, then the rear chain. Be sure the clutch is disengaged before reinstalling the belt. Check to see the belt is installed correctly and seated properly in the pulleys.

**MOWER BELT:** The belt is a super combine type manufactured to Simplicity specifications. To insure long life and efficiency, never substitute standard fractional horsepower belts. Use only the Simplicity belt designed for this particular application. See your Simplicity dealer for replacement belts and parts.

After the first 5 to 10 hours of use, the mower cross-drive belt may stretch slightly. Belt tension is increased as follows:

1. Remove the fasteners which hold the belt cover in place and pull the cover off.

2. Loosen the idler pulley mounting nut. The pulley is mounted in a slotted hole. Apply pressure with a wooden block or similar tool to the pulley in the direction indicated until the belt tension is tighter. Hold the pulley in position while retightening the nut.



Clean all grass clippings and material from the housing. Inspect the curved baffle plate to see if it is bent or damaged. Rotate the blades by hand to see that the ends are level with each other. Inspect the blades closely after each mowing. Sharpen or remove small nicks with a file or stone.

Deep nicks in the cutting edge can only be corrected by grinding, which requires that the blade be balanced. For this service, see your Simplicity dealer or proceed as follows:

## BLADE REPLACEMENT

Do not attempt to remove the blades until you have the correct size box, socket or open end wrenches for the blade mounting bolts.

## NOTE

*DO NOT remove the arbors. Remove the blade from the arbors. To sharpen a blade yourself, clamp it in a vise and use a 10 in. file along the original bevel. File to a razor edge. To balance, insert a knife blade or small rod through center hole to see if blade rests with both ends balancing evenly. File heavy side until even.*

## CAUTION

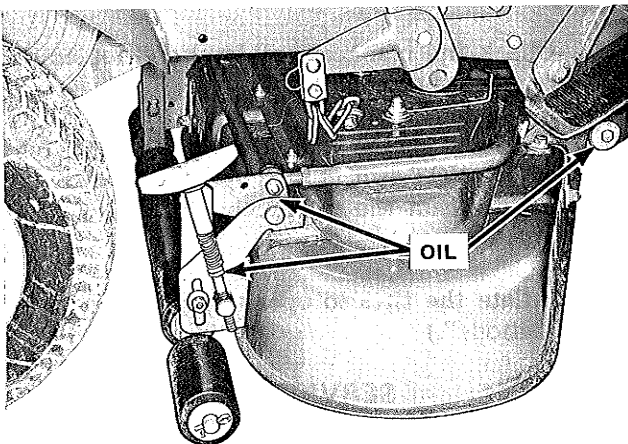
**ALWAYS HANDLE BLADES WITH CARE TO AVOID INJURY.**

Carefully clean the blade and arbor. Install the new or sharpened blade with the lift tabs toward the top. Install the two blade mounting screws and lockwashers. Tighten the bolts alternately 2 turns at a time to 30 ft. lbs. torque. Use a block or wedge to keep the blade from turning while tightening bolts.

Rotate the blades by hand slowly to see that the ends clear the housing all around and the tips are running true.

If the mower is properly adjusted and in apparent good condition but seems to require excess engine power, it may be that an arbor shaft or sleeve has been damaged by hitting an obstruction. Check the blade drive system. The rotor spindles should turn with 1 to 2 lbs. pull on the blade with the drive belt removed. If the pull pressure exceeds 2 lbs., the unit is robbing power from the engine. Tight bearings, a bent arbor shaft or spindle housing can be repaired or replaced by your Simplicity dealer.

**LUBRICATION:** Apply light engine oil to the height adjuster, all pivot points and linkage. The mower spindle housings and pulleys have ball bearings which are prelubricated and sealed, requiring no maintenance. The rubber rollers have plastic bushings which do not require lubrication.

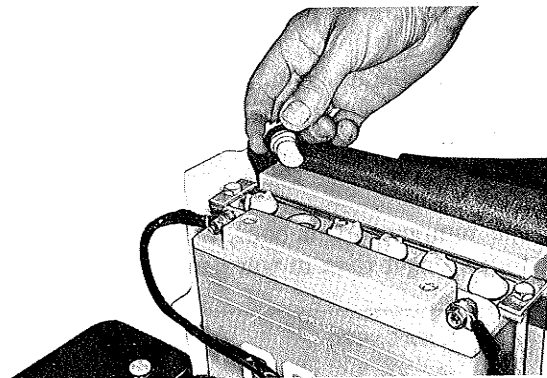


## BATTERY (ELECTRIC START MODELS)

For battery charging instructions covering the trickle charge system (accessory on Model 578), see "ATTACHMENTS AND ACCESSORIES." Battery care and new battery installation on both the trickle charge system and the flywheel alternator system are the same.

**BATTERY CARE:** If starting problems arise, it is not necessarily due to a worn out or defective battery. Many times only a full recharge is required.

Test the battery solution monthly with a hydrometer. If the specific gravity tests 1.225 or less, recharge the battery. At the same time, inspect the level of the solution. If necessary, add distilled water until the "Upper Level" line on the battery is reached. Distilled water should always be added just prior to recharging to thoroughly mix the added water into the solution. **NEVER ALLOW THE SOLUTION TO FALL BELOW THE "LOWER LEVEL" LINE ON THE BATTERY.**



## CAUTION

**NEVER FILL THE BATTERY TO A LEVEL HIGHER THAN THE "UPPER LEVEL" LINE. NEITHER SIMPLICITY MFG. CO. NOR THE BATTERY MANUFACTURER WILL BE RESPONSIBLE FOR DAMAGE CAUSED BY OVERFILLING. ALWAYS REMOVE THE BATTERY FROM THE TRACTOR BEFORE REFILLING.**

Keep the top of the battery clean and dry at all times. No grease or oil should be allowed to accumulate. Keep the battery snugly mounted. If it is removed for any reason, always tighten the hold-down bolts securely when reinstalling. Screw the filler caps in tightly and keep the vent holes open.

**NEW BATTERY:** When installing a new dry-charged battery, proceed as follows:

1. Remove wicks or tapes covering filler cap vent holes. Remove all of the caps and make sure all vent holes are open.
2. Fill the battery with 1.265 specific gravity electrolyte to the "UPPER LEVEL" line on the battery. **DO NOT OVERFILL.** Room, battery and electrolyte temperature should be 70° to 100°F.

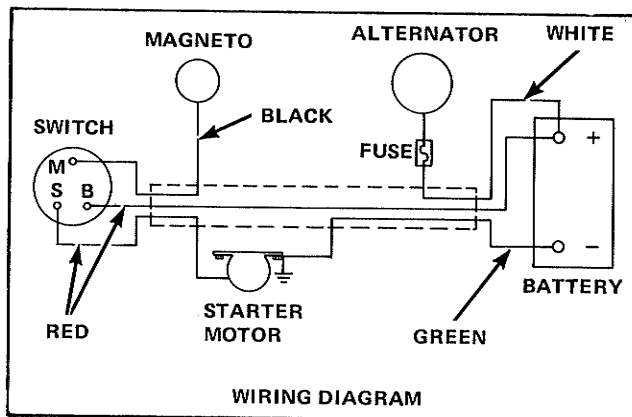
3. Allow the battery to set for about 20 minutes after filling. Install the filler caps and mount the battery on the tractor. Connect the wiring harness leads to the terminals, positive (+) cable first, negative cable (-) last. Coat the terminals with grease or Vaseline to inhibit corrosion.

4. The battery is then ready for use, but these additional steps should be followed for best results:

On alternator-equipped tractors (Model 579) start the tractor manually and run at medium speed. Test the battery solution with a hydrometer. Run the engine until the specific gravity reading is 1.265 – 1.275.

On trickle charge systems, plug the charger in as described in "ATTACHMENTS AND ACCESSORIES" and take the same hydrometer readings.

If the temperature is cool, the charging time may be quite longer than in warmer weather.



**GENERAL REPAIRS:** To prevent rusting, sand off and paint any parts or areas which become chipped or damaged. Apply a good rust preventive to all bare metal parts. Tighten all fasteners and guards securely.

### OFF-SEASON STORAGE

1. Drain the fuel tank completely by running the engine until it stops. If desired, fuel can be stored in containers or in the tank by using STA-BIL brand gasoline stabilizer, available at your Simplicity dealer. Add a can capful to the fuel in the tank or follow the directions on the can for

containers of other capacity. This additive prevents formation of gum and varnish for up to one year, providing easier starting and a clean fuel system.

2. Drain and refill crankcase while engine is warm. See "Maintenance", page 12.

3. Remove spark plug, pour 1 oz. 10W-30 oil into cylinder through plug hole. Crank engine a few times to distribute oil. Reinstall plug.

4. Clean dirt and chaff from cylinder head fins and engine housing.

5. Apply grease to all fittings and light engine oil to all points listed in "Maintenance", page 13.

6. Block the machine up off the wheels to relieve weight and keep tires off a damp floor. Protect the tires from prolonged exposure to direct sunlight.

7. Store the machine in a dry place indoors.

### STARTING AFTER STORAGE

1. Remove the spark plug and wipe it dry. Crank the engine a few times to blow the excess oil out of the plug hole. Reinstall the plug.

2. Fill the fuel tank completely with fresh "Regular" gasoline (unless the STA-BIL additive has been used).

3. Service the air cleaner. (See page 12.)

4. Check the crankcase oil level and replenish if necessary. (See page 12.)

5. Start the engine and let it run slowly for 5 minutes. *DO NOT* run at high speed immediately after starting. Run the machine outdoors or in a well ventilated area.

6. Inflate the tires to operating pressure. (See "Specifications".)

### SERVICE

For replacement parts, engine service, blade sharpening or balancing, see your Simplicity dealer. Be sure that anyone who ever may operate the mower reads the owners manual thoroughly.

**USE ONLY SIMPLICITY BELTS AND BLADES.**



# ATTACHMENTS AND ACCESSORIES

AVAILABLE FROM YOUR SIMPLICITY DEALER.

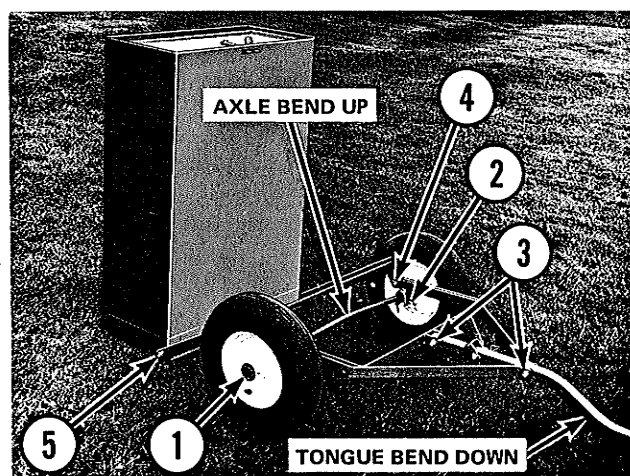
MFR'S. NO. 085-1000 LB. DUMP CART.

DUMP CART SPECIFICATIONS		
Material	Heavy Gauge Reinforced Steel	
Capacity	Weight	1,000 lbs.
	Volume	7 cu. ft. struck 10 cu. ft. heaped
Box Size	Length	39 in.
	Width	26 in.
	Height	12 in.
Tires	Type	Pneumatic
	Size	4.80/4.00 x 8
Shipping Wt.	Approx. 116 lbs.	

## ASSEMBLY

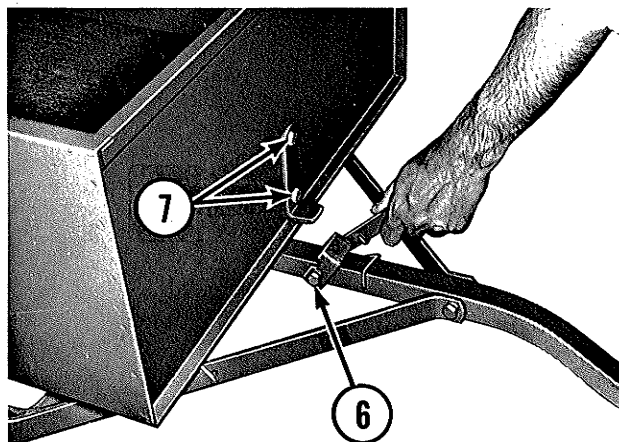
The illustrations show the assembled unit. Attaching hardware is installed as follows:

1. 3/4 in. dia. washers and 1-1/2 in. long cotter pins (2 each).
2. L-shaped pins and spring clips (2 each).
3. 2-1/4 in. long capscrews, lockwashers and nuts (2 each).
4. 1-1/2 in. long clevis pins and spring clips (2 each).
5. 3/8 in. long bushings, 1 in. long capscrews, lockwashers and nuts (2 each).



6. 2-3/4 in. long capscrew, washer and locking nut (1 each).
7. 1 in. long capscrews, nuts and lockwashers (2 each).

Attach the cart tongue to the tractor with the remaining 2 in. long pin and spring clip.



With its patented dump feature, the box can be unlatched without detaching from the tractor and turned completely upside down by tilting up and back to empty all contents without shoveling. The tail gate is removable by pulling it straight up.

## NOTE

*The axle is bent up slightly in the center. This is to compensate for heavy loads. When the cart is loaded to capacity the axle straightens so the wheels remain vertical under load.*

**LUBRICATION:** The grease fittings on the wheels require only occasional lubrication with general purpose automotive grease. Before greasing, wipe the fittings clean. Apply light oil frequently to all pivot points and the front latch.

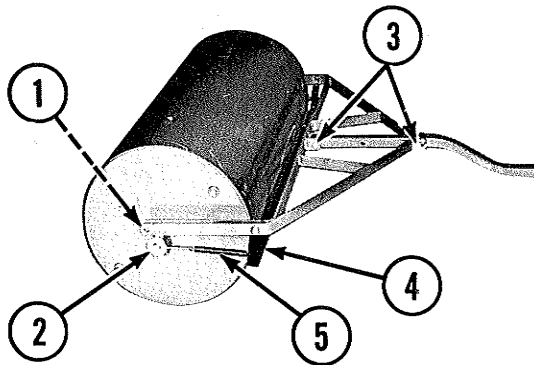
**TIRES:** The tires are over-inflated for shipping purposes. Deflate them to 6-8 psi for normal lawn use. Before carrying heavy loads, increase tire pressure to 14-16 psi.

MFR'S. NO. 227-36 IN. LAWN ROLLER.

LAWN ROLLER SPECIFICATIONS	
Roller	Material: 12 gauge steel
	Width: 36 in.
	Diameter: 18 in.
	Water Capacity: 40.2 gal.
	Weight (Full): 370 lbs.
Scraper Length	40-5/8 in.
Overall Dimensions	Length: 51 in.
	Height: 18 in.
	Width: 44 in.
Shipping Wt.	96 lbs.

### ASSEMBLY

1. Place a 3/4 in. washer over each roller axle up against the roller and slide the nylon bushings on.
2. Place the frame on the axle over the bushings and install the outer 3/4 in. washers and cotter pins.
3. Bolt the tongue to the frame as shown.
4. Mount the scraper bar to the frame with the pins and spring clips. The scraper arms fit between the two frame sidebars.
5. Insert the spring holding pins through the frame axle saddles and secure with the remaining spring clips. Hook the spring ends through the holes in the pin and the scraper.

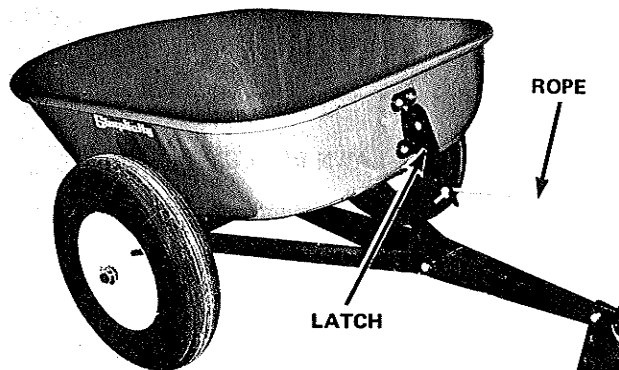


Attach the roller tongue to the tractor hitch with the remaining pin and spring clip.

Never leave the roller filled with water where it may freeze.

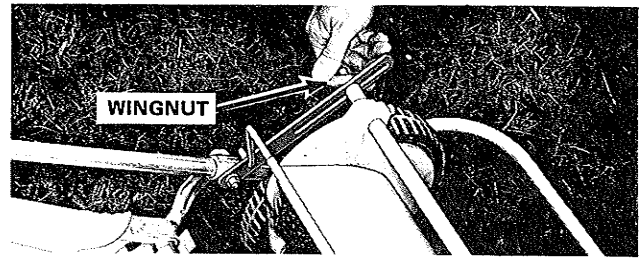
### MFR'S. NO. 625-400 LB. DUMP CART.

The smaller cart can be tilted to dump without dismounting by pulling the rope attached to the front latch. The cart features a one-piece shell and one-pin hitching.



### MFR'S. NO. 626-PARKER TRAILING LAWN SWEEPER.

The sweeper features one-pin hitching and can be emptied easily by a pull of the rope. The height of the sweeper brush is adjusted by loosening the side wingnuts.

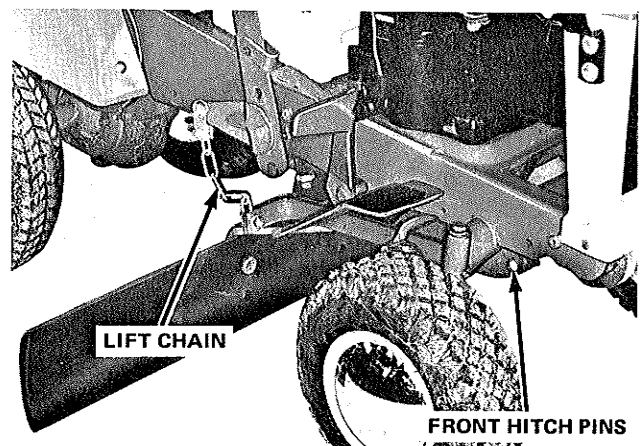


### MFR'S. NO. 298-40 IN. GRADER BLADE.

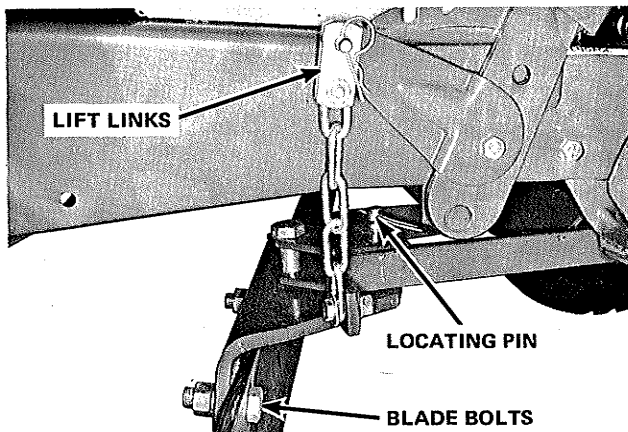
SPECIFICATIONS	
BLADE	MATERIAL: 1/2 Inch Thick High-Carbon Steel
	TYPE: Double-Edged, Reversible
MOUNTING	FRONT: Two Pins to Front Hitch
	REAR: One Pin to Lift Chain
	TRANSPORT HEIGHT: Adjustable
ANGLES	3 Positions with Locking Pin
DIMENSIONS	BLADE WIDTH: 40 Inches
	SHIPPING WEIGHT: 48 Lbs.

### ASSEMBLY

1. Position the blade under the tractor and attach the drawbar to the front hitch brackets with two pins and spring clips.



2. Attach the lift chain and links to the left lever arm with the remaining pin and spring clip.

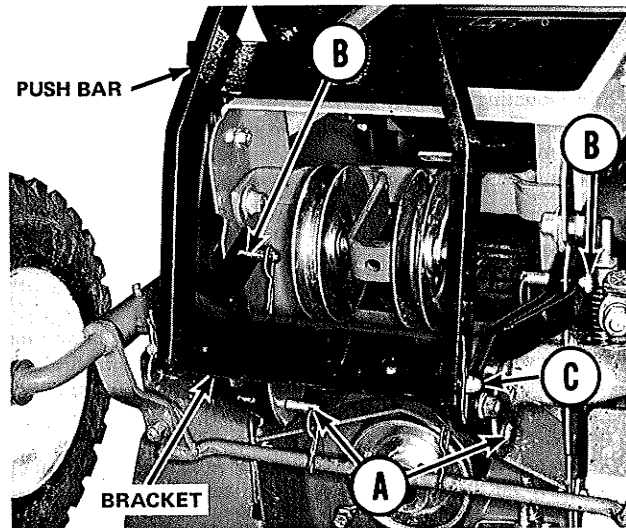


#### OPERATION

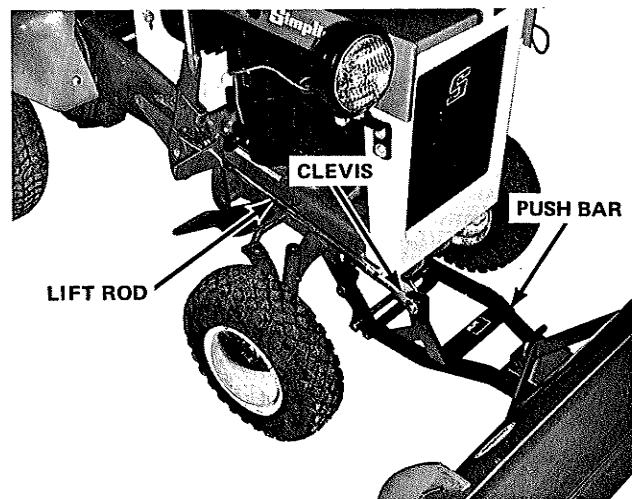
The blade can be angled to left or right by removing the locating pin and spring clip from the center hole of the hitch assembly. Lock the blade at the angle desired by installing the pin in the alternate hole in the blade bracket. To allow the blade to be lifted as high as possible for clearance during transport, shorten the lift chain by attaching the second or third chain link to the lift links. The useful life of the blade is doubled by reversing it. Simply remove the blade mounting bolts, turn the blade upside down and reinstall the bolts.

To lift the blade, grasp the lift lever handle, depress the button and move lever forward. Release the button to lock the latch on the front of the quadrant. Push button and move lever to rear to lower blade.

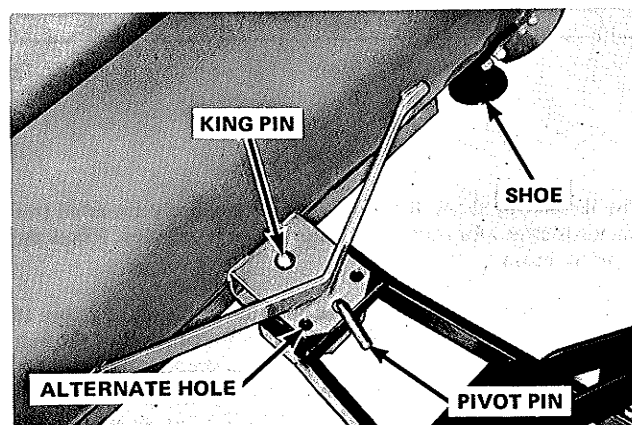
2. Attach the push bar to the bracket with the long pin (C) and two spring clips.



3. Insert the lift rod end into the lift lever hole and secure with a spring clip. Attach the rod clevis to the push bar upright arm with the remaining pin and spring clip.



4. Attach the blade to the push bar with the king pin inserted from the top. Secure the king pin with a spring clip.



#### MFR'S. NO. 299-42 IN. SNOW PLOW AND DOZER BLADE.

SPECIFICATIONS	
BLADE	WIDTH: 42 Inches
	HEIGHT: 15-3/4 Inches
	MATERIAL: Heavy Gauge Steel
	FRONT SUPPORT: Adjustable Shoes
	MOUNTING: Front Axle
	POSITIONS: 3
	ANGLES: 30° Each Direction
	SCRAPER BAR: Hardened, Replaceable
	CLEARANCE, RAISED POSITION: 5-1/2 Inches Maximum
CONTROLS	RAISE & LOWER: Tractor Lift Lever
	ANGLE ADJUSTMENT: Pivot Pin at Front
DIMENSIONS	LENGTH: Including Tractor - 67-1/2 Inches
	WIDTH: 42 Inches
	WEIGHT: NET: 67 Lbs. SHIPPING: 67 Lbs.

#### ASSEMBLY

1. All mounting holes are pre-drilled in the frame and front axle. Attach the mounting bracket to the tractor. Install the rear pins (A) in the axle ears first. Then install the front pins (B) at the frame holes. Note that bracket arms straddle the frame sides. The arm bolts may be loosened to position the arms. Secure the pins with the spring clips.

## OPERATION

Alternate holes for the pivot pin are provided to permit adjustment of the blade angle. Move the pin to the desired hole to angle the blade left or right.

Extra mounting holes are provided for the shoes to raise or lower the blade. For clearing gravel walks or driveways, mount the shoes in the lower two holes to raise the scraper edge. For driveways or concrete, raise the shoes to let the blade scrape the surface.

For most effective use of the blade, install the set of rear tire chains (Mfr's. No. 124) for greater traction. Mount the chains loosely for self-cleaning.

To raise the blade, grasp the lift lever handle, depress the button and pull the lever toward the rear. Release the button to lock the latch in the rear quadrant notch. Depress the button and move the lever forward to lower the blade.

It is suggested that rear wheel weights and tire chains be installed on the tractor for most effective use of the blade. Install the chains loosely for self-cleaning.

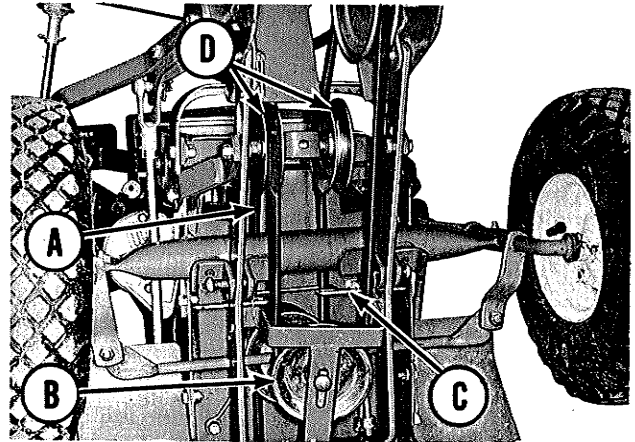
## MFR'S. NO. 477-32 IN. SINGLE STAGE ROTARY SNOW THROWER.

ROTARY SNOW THROWER SPECIFICATIONS		
AUGER	DRIVE TYPE	Cushioning V-Belt and Roller Chain
	CLUTCH	V-Belt Idler
	CONSTRUCTION	Solid Flite Welded Steel
	DIAMETER	14 Inches
	EFFECTIVE WIDTH	32 Inches
HOUSING	ROTATION SPEED	943 R.P.M.
	MOUNTING	Front Axle, Four Pins
	CONSTRUCTION	Welded Steel
	OPENING HEIGHT	19 Inches
	CHUTE DIAMETER	6-1/4 Inches
CONTROLS	FRONT SUPPORT	Adjustable, Hardened, Large-Area Skid Shoes
	SCRAPER BAR	Full Width, High Carbon Steel, Replaceable
	ADJUSTABLE	ROTATION: 255 Degrees
	SPOUT	BEARING: Polyethylene, No-Chatter, Freeze Proof
	AUGER DRIVE	Tractor Power Take-Off
DIMENSIONS	RAISE & LOWER	Tractor Lift Lever
	SPOUT	Handle to Right of Operator
	ROTATION	TYPE: Freeze-Proof Aircraft Cable
	LENGTH	INCLUDING TRACTOR: 73-1/2 Inches
	WIDTH	33-5/8 Inches
	WEIGHT	NET: 112 Lbs. SHIPPING: 126 Lbs.

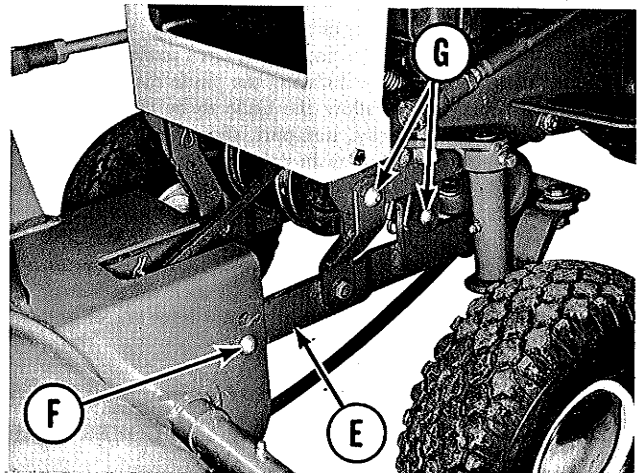
## ASSEMBLY

The illustration shows the snow blower completely mounted (the tractor is tipped for clarity only). For easiest installation, follow the sequence below:

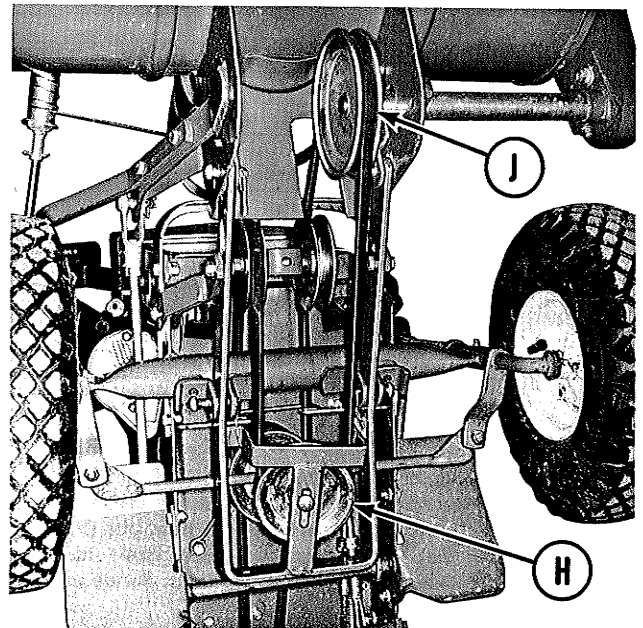
1. Place the drive belt (A) in position on the lower groove of the engine pulley (B). Pass the belt through the loops of the belt stop (C). Give the belt a suitable "twist" to properly fit the p.t.o. pulleys (D) and let it lay temporarily over them. Rotate the front belt stop on the left p.t.o. pulley out of the way so it does not interfere with the blower belt.



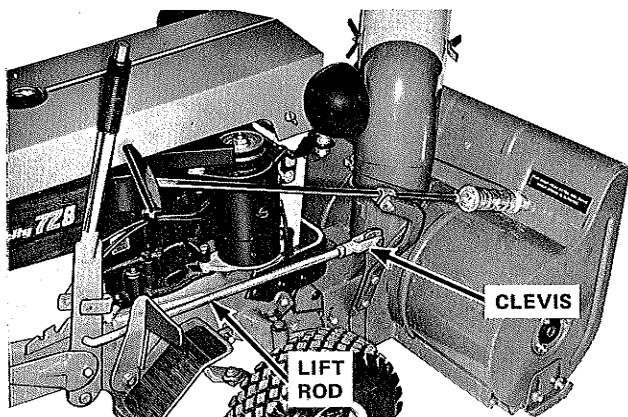
2. Attach the hitch (E) to the snow thrower housing with two pins and spring clips (F). Move the housing and hitch into position at the front of the tractor and attach the hitch to the tractor axle and frame at points (G) with pins and spring clips.



3. Position the belt in the groove of the hitch pulley (H). Then pull all slack forward to the left side and seat the belt around the auger drive pulley (J). The hitch pulley (H) can be moved in its slotted hole to provide slack. (See "Adjustments".)



4. Connect the lift rod end to the lift lever with a spring clip. Connect the clevis end of the rod to the lift bracket on the hitch with the remaining pin and spring clip.



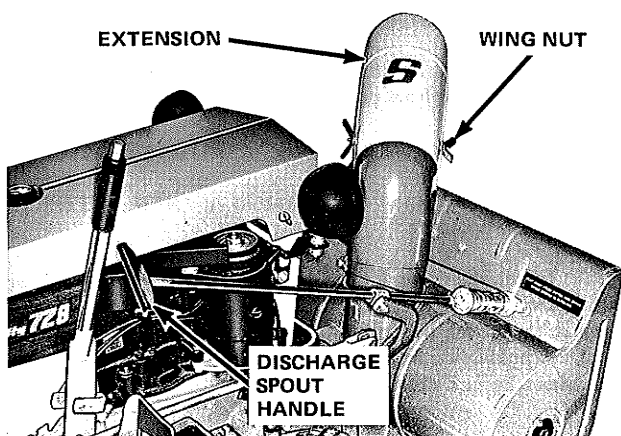
#### OPERATION

It is suggested that rear wheel weights and tire chains be installed on the tractor for most effective snow removal. Install the chains loosely for self-cleaning.

Engage or disengage the auger drive with the tractor power take-off lever. Operate at 3/4 to full engine speed, using the foot pedal to control ground speed. Operate in first or second gear.

Twist the discharge spout control handle so that the snow will be thrown **WITH** the wind, never into it. Always adjust the spout and extension so that you are well out of the path of blowing snow.

The distance which the snow is thrown can be controlled by adjustment of the discharge spout extension. Loosen the two wingnuts on the extension to raise or lower it to the desired angle. After adjusting the angle, push it down snugly against the spout to prevent snow being blown back against the engine and operator. Hold the spout in desired position while tightening the wingnuts.



When removing extremely heavy drifts, pull back on the lift lever and raise the snow thrower while making the first pass. Then back off, lower the unit and make a second pass. It may be easier to use only part of the auger width on subsequent passes. Ease the blower into the snow by running at top speed and using the foot pedal for control. This will avoid clogging up the auger and burning the belt.

If an object becomes lodged in the auger or obstruction is encountered, **DISENGAGE THE DRIVE IMMEDIATELY**. Stop the engine before cleaning out the intake housing or removing obstacles from your path.

Effective plowing methods will vary from one snowfall to the next, and from area to area. The operator will learn through experience how to obtain the best results.

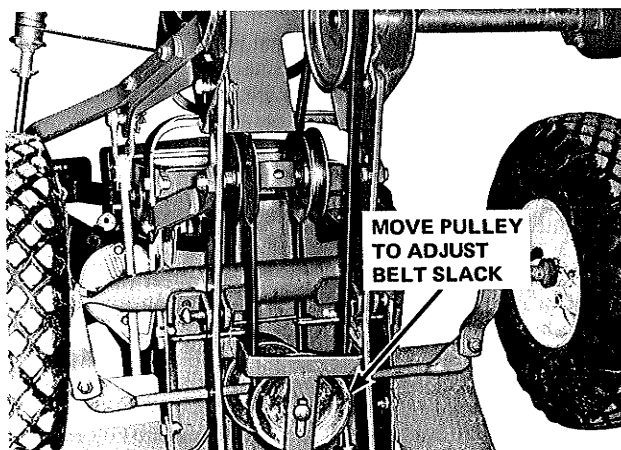
#### IMPORTANT

*AFTER PLOWING, MOVE THE MACHINE TO A SHELTERED LOCATION AND ALLOW THE ENGINE TO RUN FOR ABOUT FIVE MINUTES TO DRY ITSELF AND PREVENT ICING. IF POSSIBLE, STORE THE SNOW THROWER IN AN UNHEATED PLACE SO THAT CLINGING SNOW DOES NOT MELT AND REFREEZE LATER TO ICE.*

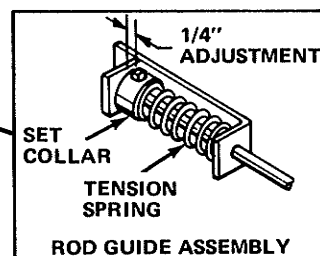
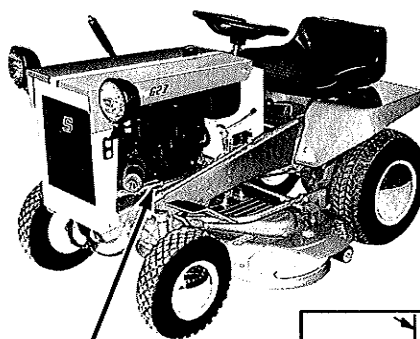
When transporting the snow thrower, always disengage the power take-off, pull the lift lever back to latched position and carry the snow thrower in raised position.

#### ADJUSTMENTS

**DRIVE BELT:** The hitch pulley may be moved forward or back in the slotted hole to adjust belt slack. If the belt slips when the p.t.o. is engaged, move the pulley back. If the belt is too tight for proper idling, move the pulley forward.

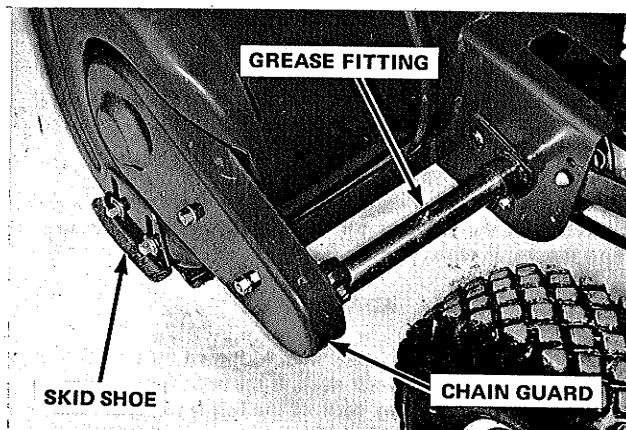


**CLUTCH ADJUSTMENT:** After the belt slack adjustment is made, check the p.t.o. clutch rod spring. Engage the lever and check the spacing between the set collar and the rod guide. Loosen the setscrew and adjust the collar to the 1/4 in. dimension shown.





**SKID SHOES:** Adjust the auger housing side skid shoe height to suit the type of surface to be cleared. For moving across gravel or crushed stone, loosen the mounting nuts and lower the shoes to raise the housing scraper bar. Retighten the nuts securely. Be sure both shoes are at equal height. For clearing smooth pavement, raise the shoes to allow the scraper bar to rest on the ground.



#### LUBRICATION

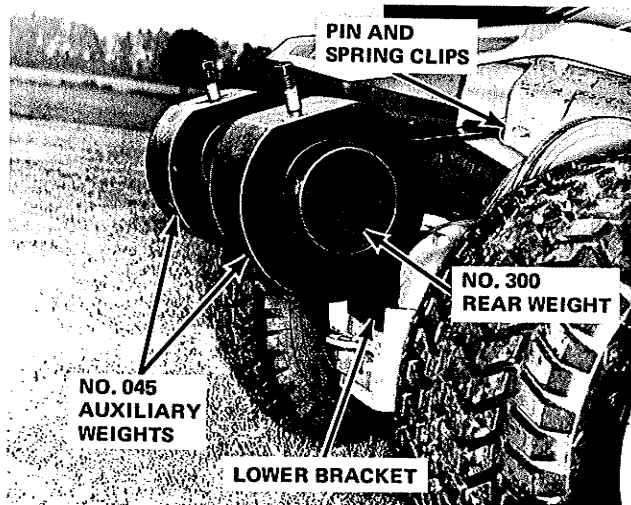
Every 15 operating hours, apply general purpose automotive grease to the auger drive shaft fitting. At the same time, remove the chain guard and coat the drive chain with grease. Apply light engine oil occasionally to the spout control linkage and all pivot points.

#### MFR'S. NO. 300-REAR WEIGHT.

Mount the rear weight as shown. The lower bracket saddle fits the tractor rear hitch plate. Attach the top bracket to the seat frame with the long pin and two spring clips.

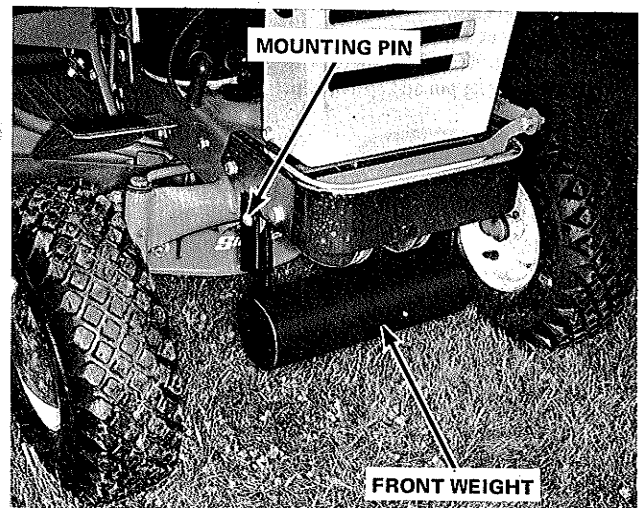
#### MFR'S. NO. 045-AUXILIARY WEIGHT.

One or two 25 lb. auxiliary weights can be mounted on No. 300 weight as shown. Tighten the setscrews securely to hold in place.



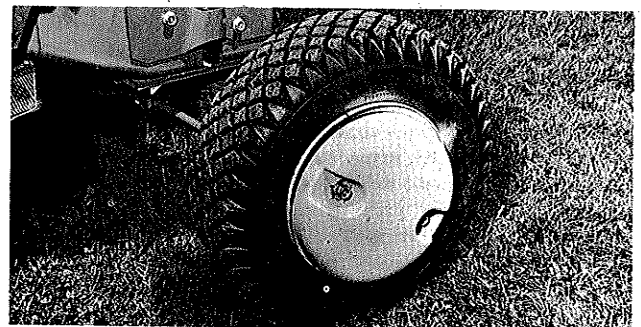
#### MFR'S. NO. 466-FRONT WEIGHT.

The front weight is attached to the frame mounting holes with pins and spring clips.



#### MFR'S. NO. 449-WHEEL WEIGHT.

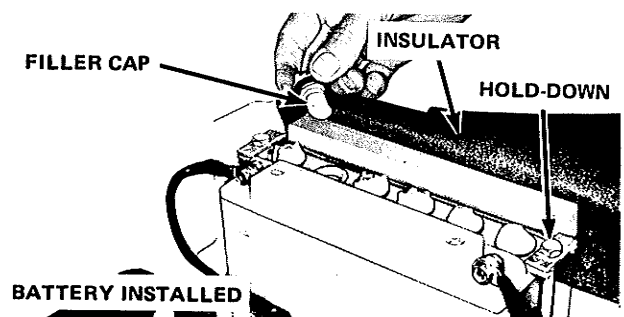
Holes for mounting wheel weights are pre-drilled in the wheel flanges.



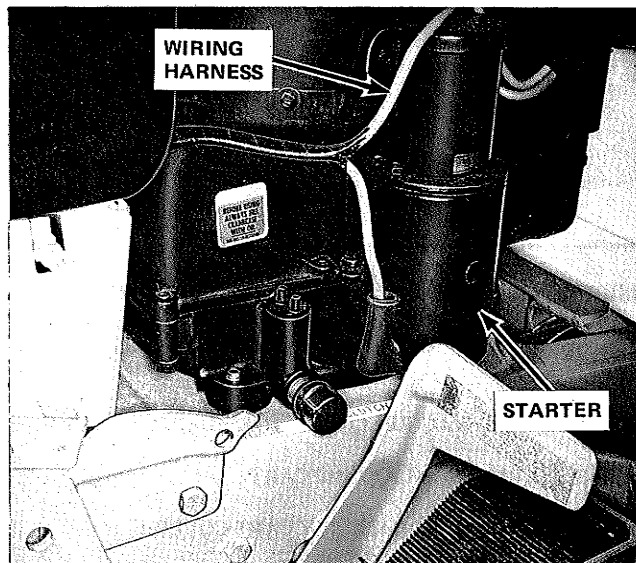
#### MFR'S. NO. 530 - ELECTRIC STARTER KIT.

ALL mounting holes for the battery, Bendix starter, charger plug clip and ignition switch are pre-drilled on the tractor.

1. Remove the engine hood. (See "MAINTENANCE".)
2. Prepare the battery as instructed in "NEW BATTERY" under "MAINTENANCE".
3. Install the battery with the terminals toward rear. Insert the insulator sheet between the battery and the frame front grille as shown so that it can be flapped back across the top of the battery. Install the hold-down and secure it with the long bolts, nuts and lockwashers. Be sure all filler caps are tight.

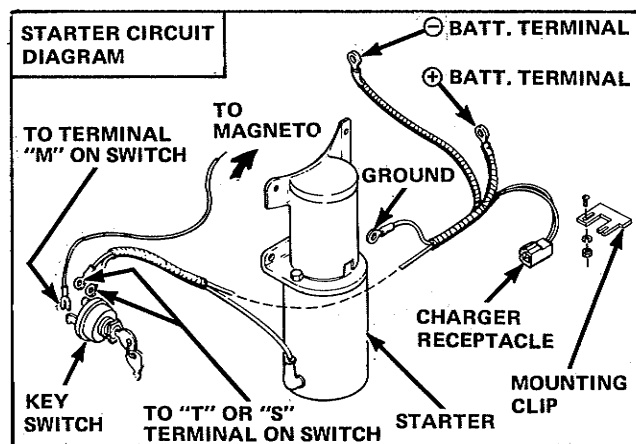


4. Install the Bendix starter as shown with the four capscrews provided.



5. Attach the wires to the switch before installing the switch. See circuit diagram. Remove the plug from the switch hole at the right of the instrument panel. Take the special thin hex nut off of the switch, insert the threaded barrel through the hole and secure the switch with the nut.

6. Attach the wires to the magneto and starter terminals. Route the harness to the front. Install the charger mounting clip and the charger receptacle. Connect the battery cables. **CONNECT THE POSITIVE (+) CABLE FIRST, THEN THE NEGATIVE (-) CABLE.** Note that the harness ground wire is attached under the lower front starter capscrew. Reinstall the engine hood.



The 12 volt, 18 amp. hr. battery will provide approximately 75 to 100 starts before recharging. Under normal use, the battery charger should be connected for a period of about 12 hours (or overnight) once a week.

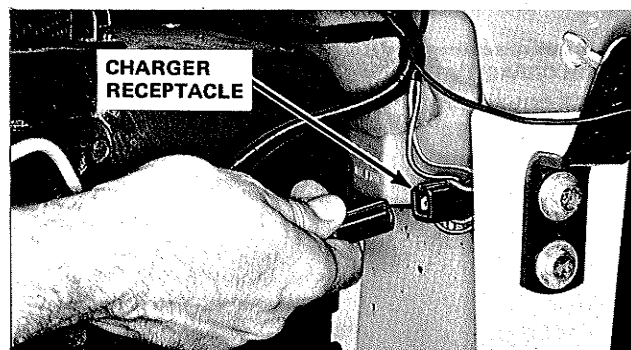
#### CAUTION

**USE NO BATTERY CHARGER OTHER THAN THE ONE PROVIDED WITH THE TRACTOR.**

**RECHARGING:** The tractor should be parked in a well-ventilated area. Make sure the vent holes in the filler caps are open to allow gases to escape. Run a fine wire through the holes if necessary.

1. Plug the charger connector into the receptacle on the tractor. Note that the connector will fit only if it is properly aligned with the notch in the receptacle.

2. Plug the charging unit into a 110 volt, 60 cycle A.C. outlet. The charger can be left connected for up to 24 hours without damage to the battery. **DISCONNECT THE CHARGER BEFORE STARTING THE ENGINE.**

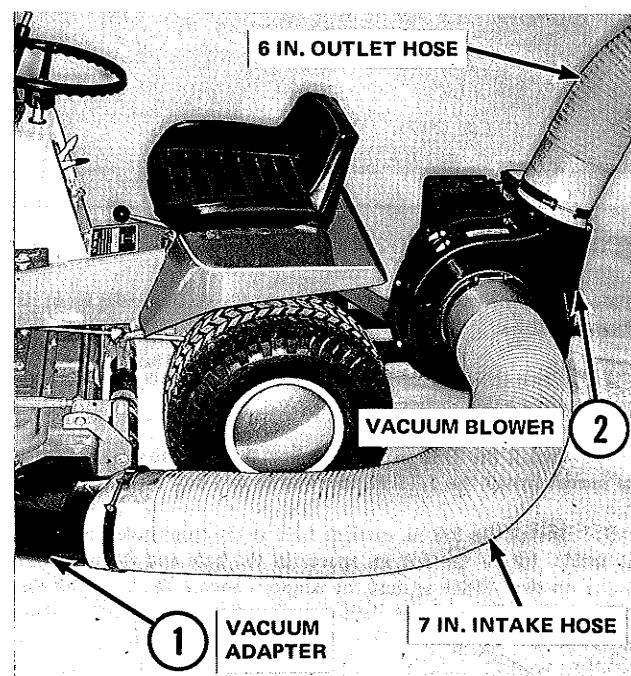


#### VACUUM COLLECTOR SYSTEM

The system is composed of several separate kits. Installation of each kit is fully described under their individual headings. The system consists of the following:

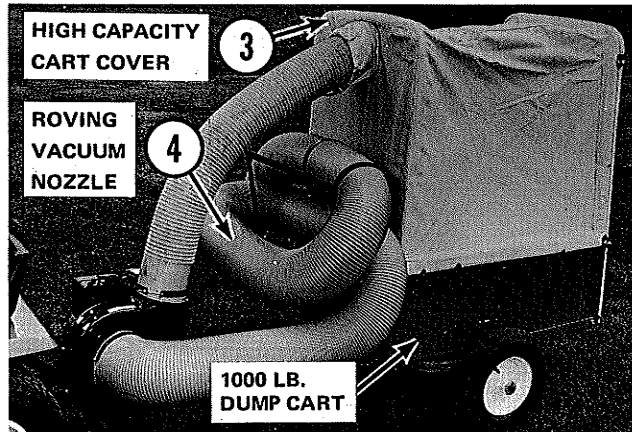
1. **VACUUM ADAPTER (MFR'S. NO. 445).** The adapter is attached to the mower housing in place of the deflector plate.

2. **VACUUM BLOWER UNIT WITH HOSES (MFR'S. NO. 506).** The blower is mounted on the tractor rear hitch. Powered by its own 4 h.p. engine, it is connected to the mower adapter by a 7 in. dia. intake hose and to the cart cover by a 6 in. dia. outlet hose. It simultaneously collects leaves, mulches them and collects grass clippings. Two-stage chopping action (mower and blower) pulverizes the clippings and trash collected to a very compact mass which is deposited into the trailing covered cart.



3. **HIGH CAPACITY CART COVER (MFR'S. NO. 531).** For storage and transport of collected material, the cover fits the 1000 lb. dump cart (MFR'S. NO. 085). The cover and cart have a capacity of about 450 lbs. or 26 bushels.

4. **ROVING VACUUM NOZZLE (MFR'S. NO. 447).** The 15 ft. long hose (shown in storage position) is used for collecting leaves and trash in or under hedges and bushes or other areas inaccessible to the tractor. It is used directly at the blower intake instead of from the mower outlet.



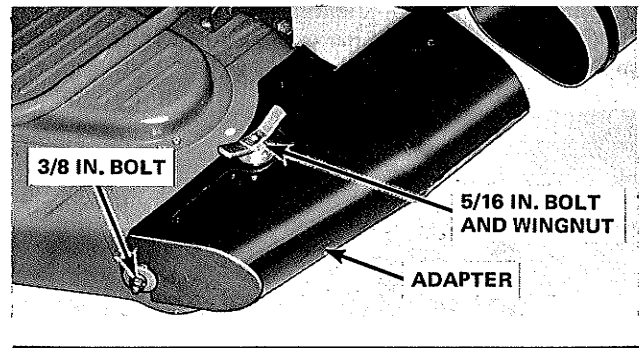
5. **LOW PROFILE CART COVER (MFR'S. NO. 624).** The low profile cover also fits on the 1000 lb. dump cart and is designed for use under low hanging branches or bushes. Capacity is about 8-1/2 bushels.



#### **MFR'S. NO. 445-VACUUM COLLECTOR ADAPTER.**

Remove the mower deflector plate. Mount the vacuum adapter in its place as follows:

1. Place the adapter over the side of the mower housing with the mounting holes aligned.
2. Install the 5/16 in. carriage bolt through the top hole from the inside. Install the 5/16 in. lockwasher and hex nut finger tight.
3. Install the 3/8 in. carriage bolt at the front hole, also from the inside. Install the 3/8 in. spacer in the hole and the large flat washer on the outside against the adapter. Secure the bolt with the 3/8 in. lockwasher and nut. Adjust the position of the adapter, then tighten both nuts securely. Install the flanged wingnut on the top mounting screw.



#### **MFR'S. NO. 506 - VACUUM COLLECTOR BLOWER.**

The vacuum collector is used with the following separate attachments:

MFR'S. NO. 445 - VACUUM COLLECTOR ADAPTER

MFR'S. NO. 085 - 1000 LB. DUMP CART

MFR'S. NO. 531 - HIGH CAPACITY CART COVER

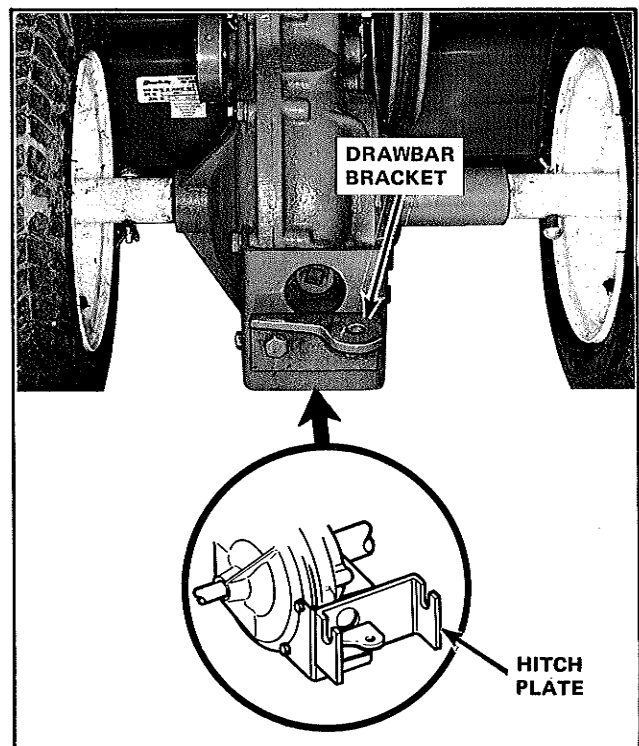
MFR'S. NO. 624 - LOW PROFILE CART COVER

MFR'S. NO. 447 - ROVING VACUUM NOZZLE

The unit is driven by its own separate 4 h.p. Briggs and Stratton engine. It simultaneously collects leaves, mulches leaves and collects clippings while mowing.

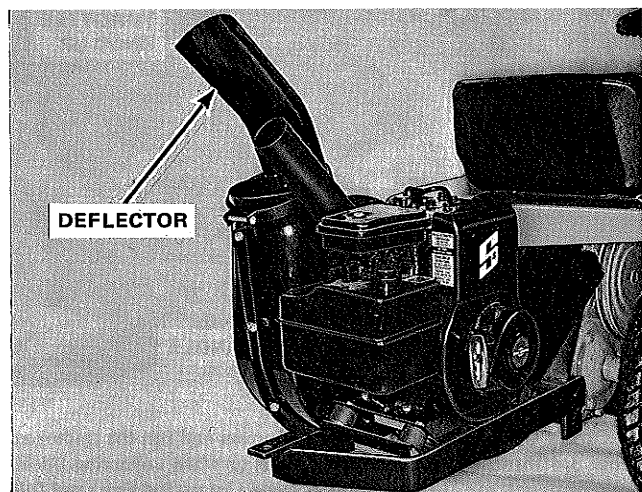
#### **INSTALLATION**

1. Remove the drawbar bracket bolts from the rear support plate on the transmission. Place the hitch plate from the kit between the drawbar bracket and the support with the notches up. Secure with the 3/8-16 x 1-1/2 in. capscrews, nuts and lockwashers provided.

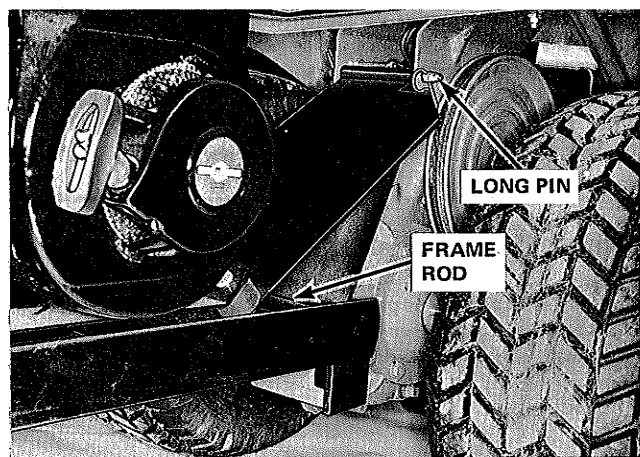




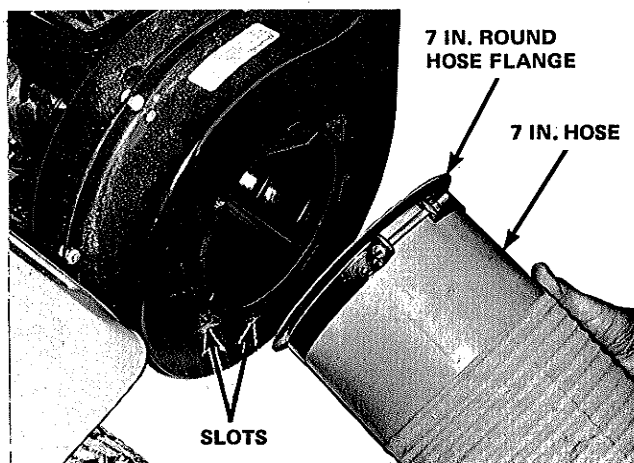
2. Attach the hose deflector plate to the top of the blower housing. The deflector fits on the outside of the blower outlet. Secure with the three No. 10 self-tapping screws.



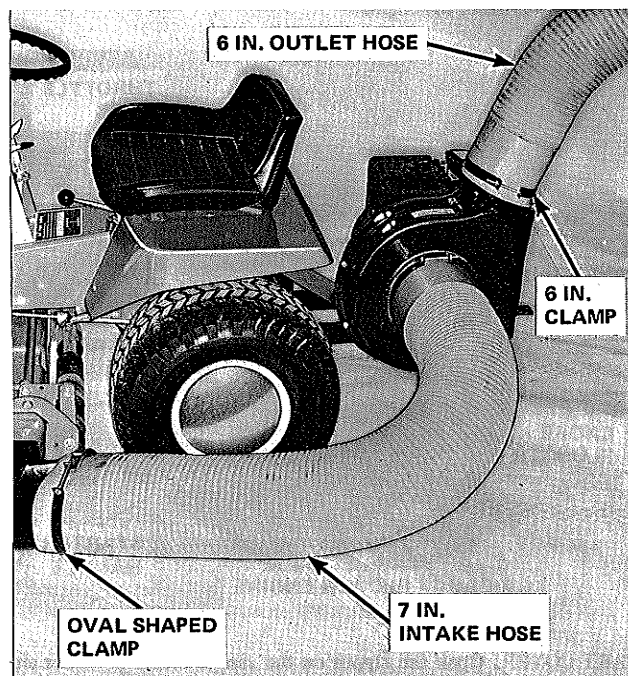
3. Install the engine and blower assembly on the tractor. Tilt it back and engage the lower frame rod in the hitch slots. Tilt it forward to align the blower frame holes with the mating holes in the seat support. Insert the long pin and secure with two spring clips.



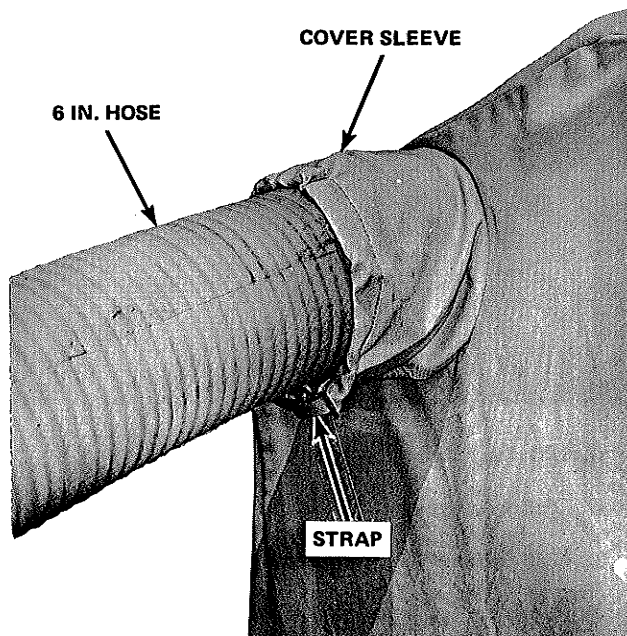
4. Install the round flange on one end of the 7 in. intake hose. Secure the clamp on the hose end with a 1/4-20 x 3 in. machine screw, lockwasher and nut. Slide the flange into the slots on the blower housing.



5. Attach the other end of the 7 in. hose to the mower adapter using the oval-shaped clamp with 1/4-20 x 3 in. machine screw, lockwasher and nut. Place the 6 in. clamp around the outlet hose end loosely. Slide the hose end down over the blower deflector against the blower housing. Tighten the clamp screw securely.



6. Attach the cart tongue to the blower hitch with a pin and spring clip. Attach the outlet end of the 6 in. hose to the cart cover opening. Insert the hose end well into the sleeve and tighten the strap.



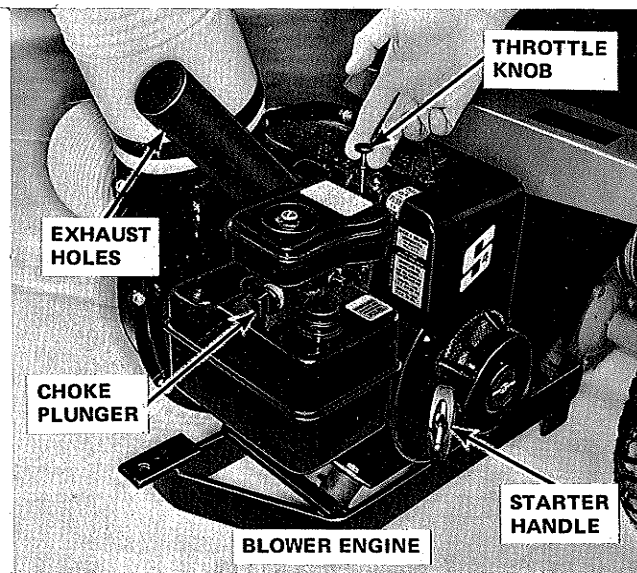
#### OPERATION

**ENGINE:** Service the blower engine according to the manufacturer's instructions. Follow the same motor oil and fuel recommendations given for the tractor engine. Check all hose connections before starting the engine.

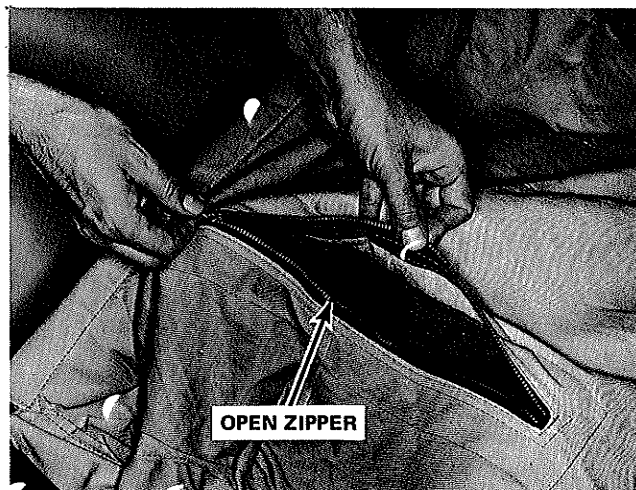
### CAUTION

**DO NOT OPERATE UNLESS BOTH HOSES ARE SECURELY ATTACHED TO THE BLOWER HOUSING.**

Position the blower engine muffler so that the exhaust holes are directed away from the engine.



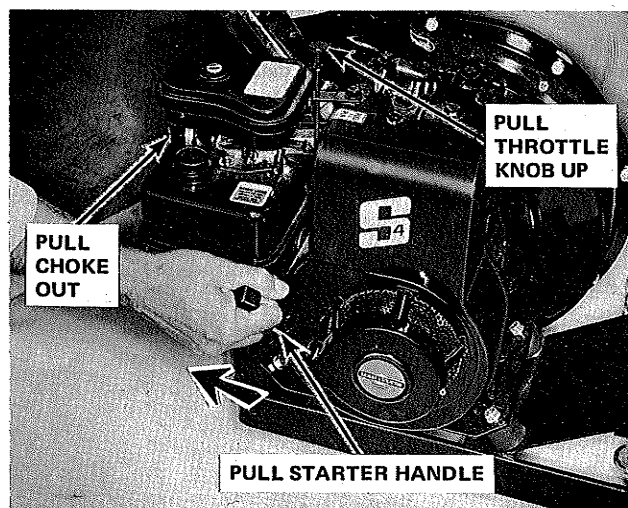
**CART COVER:** Open the zipper on the canvas trailer cover for air release during normal operation. At times it may be desired to have the zipper half open or closed.



**STARTING:** Start the blower engine as follows:

1. Pull the choke plunger out to "CHOKE" position.
2. Pull the throttle knob all the way up.
3. Grasp the recoil starter handle firmly in your right hand and pull sharply straight out to start the engine. After the engine starts, return the choke lever or plunger to "OFF" position. If the engine fails to start after 4 or 5 pulls, it may be flooded. Return the choke lever or plunger to "OFF" position and pull the starter handle to clear the excess fuel.

To stop the engine, push the throttle knob straight down all the way.



**VACUUM COLLECTING:** Engage the mower and run the tractor at about 3/4 throttle. Under wet conditions or when collecting thick, heavy material, run at slower ground speed (1st or 2nd gear) and full blower engine speed to increase vacuum.

When collecting leaves and tall grass, raise the mower to highest cutting height on the first pass, then lower it for the second pass.

In wet and extremely high grass it may be necessary to use only half the width of the mower to prevent the hoses from clogging up. Check the hoses and blower housing periodically to make sure the material does not accumulate, blocking the flow to the cart.

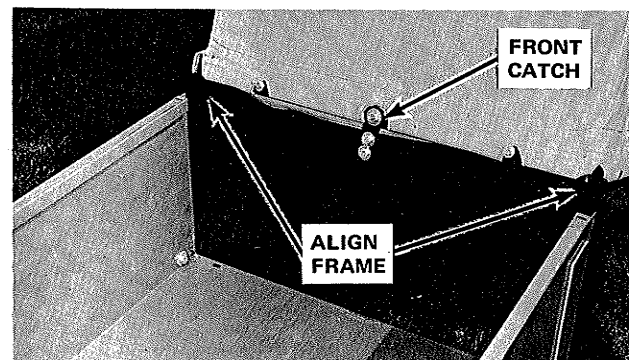
After operating, be sure to clean out the hoses and the cart thoroughly, especially at the cover sleeve connection.

### MFR'S. NO. 531-HIGH CAPACITY CART COVER.

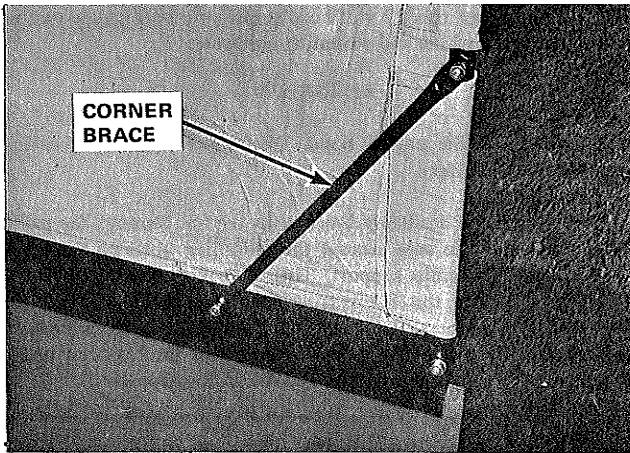
The canvas cart cover is preassembled to the frame except for the front catch and the upper hanger brackets. The rear door is stored separately. Remove the dump cart tailgate before installing the cover.

#### ASSEMBLY

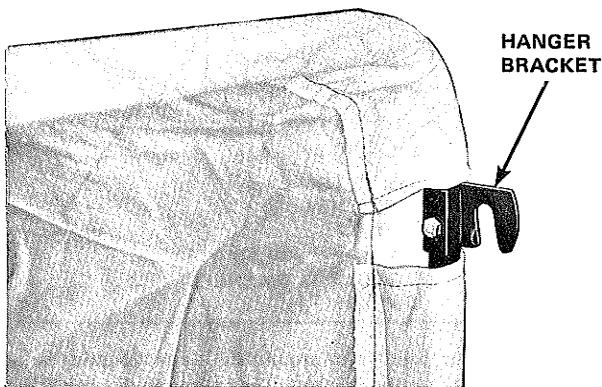
1. Install the front catch as shown, using a 3/8 x 1 capscrew, flat washer and locknut. Tighten the locknut enough to hold securely but still allow the catch to pivot.
2. Unfold the canvas and frame assembly so that the vertical frame members are upright. Align the ends of the frame channels with the cart side wall upper edges and slide the assembly forward onto the cart. Turn the catch down over the front edge of the box.



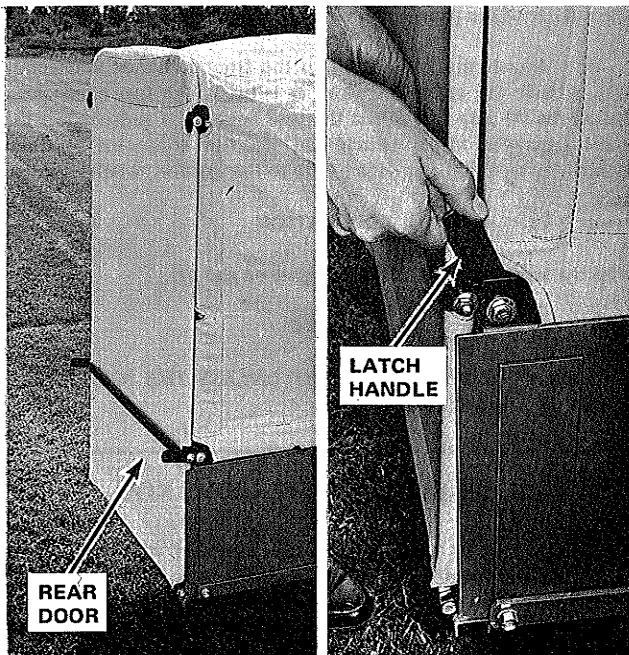
- Secure the four corner braces with the hardware attached.



- Install the rear door upper hanger brackets as shown.



- Install the rear door. Engage the upper door frame side capscrews in the hanger bracket notches and push the bottom edge into place on the box bed. Engage the rear latch handles to the door side screws as shown.

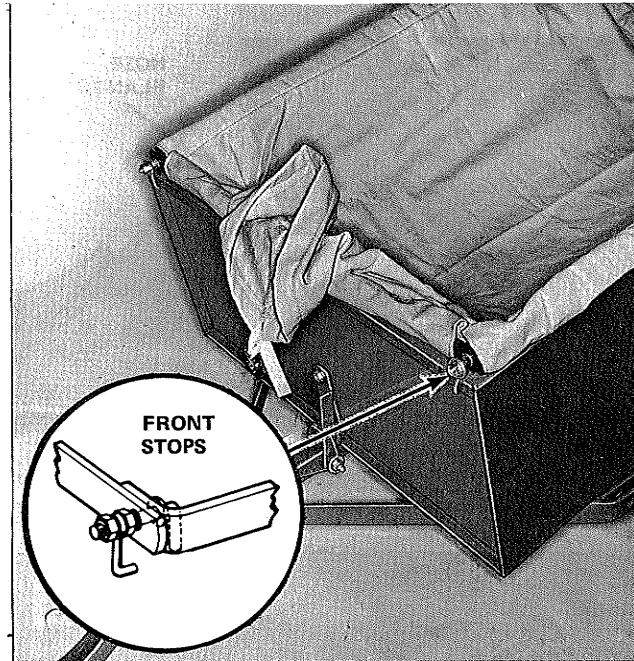


## MFR'S. NO. 624-LOW PROFILE CART COVER.

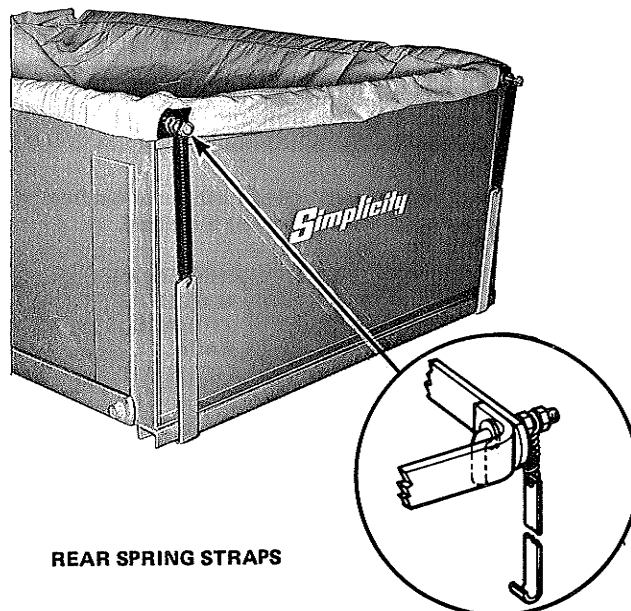
The low profile cart cover is preassembled to the frame. The cover is installed with the cart tailgate in place.

### ASSEMBLY

- Install the front stops on the cover front frame (the end with the hose sleeve). The special studs are inserted from the inside.



- Install the rear spring straps with the special studs and other hardware assembled the same way.



- Lay the assembly on the cart with the canvas side flaps inside the cart. Engage the front stops over the box front edge, then pull the rear spring straps down and hook them under the box rear edge.

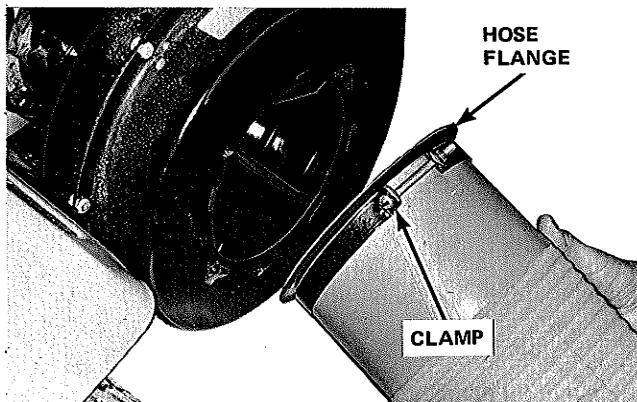


## MFR'S. NO. 447-ROVING VACUUM NOZZLE.

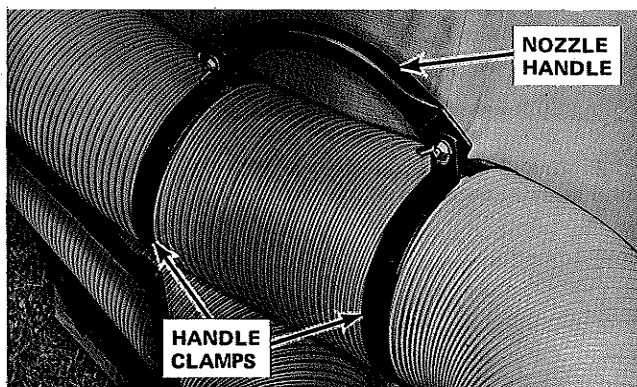
The nozzle attaches to the blower inlet in place of the hose from the mower. For storage, a rack is provided for installation on the front of the dump cart.

### ASSEMBLY

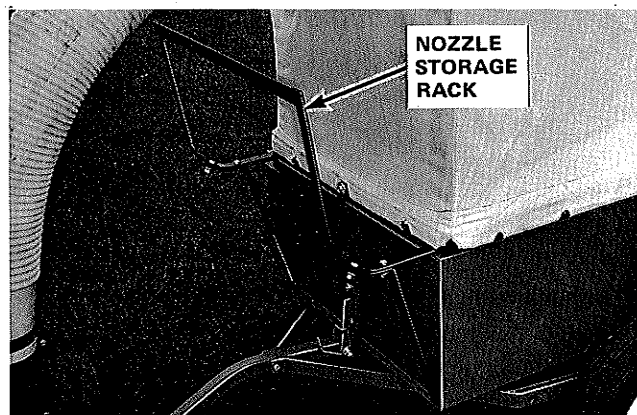
1. Install the mounting flange and clamp on the plain end of the hose. Tighten the clamp screw securely.



2. Install the hose handle clamps the desired distance from the pickup end of the hose and attach the handle.



3. The storage rack is assembled and hung onto the front of the cart as shown. No hardware for mounting is required.



4. Attach the flanged end of the roving nozzle to the blower housing, seating the flange fully in the notches.

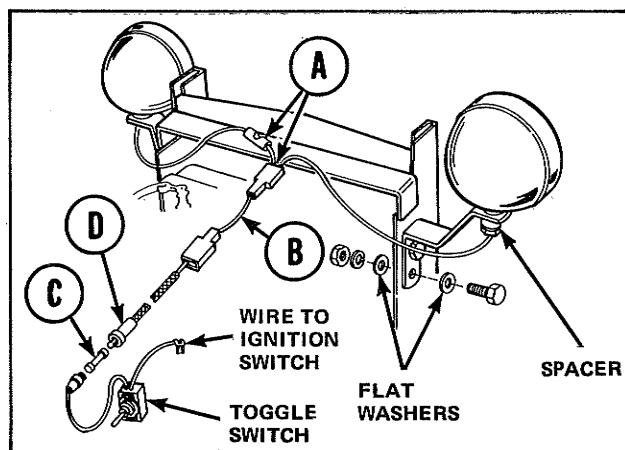
## MFR'S. NO. 618-FRONT LIGHT KIT.

The kit consists of two 12 volt headlamps, an on-off toggle switch and all necessary wiring and mounting hardware.

### ASSEMBLY

1. Remove the engine hood. Disconnect the battery cables and remove the battery.

2. Install the headlamp brackets as shown. Remove the paint from the immediate area around the mounting holes on the lamp brackets and the grille support. This is to insure good electrical grounding. Attach the brackets using the 5/16-18 x 1-1/2 in. capscrews, lockwashers, flat washers and nuts. The bottom holes of the brackets have two flat washers, one under the capscrew head, the other between the lockwasher and the grille support.



3. Remove the paint from around the lamp mounting holes and install the lamps on the brackets. The spacer mounts below the bracket. Secure with the 1/2-13 nuts and lockwashers.

4. Remove the white plastic plug button from the 1/2 in. hole at the instrument panel (see Tractor "Controls"). Install the toggle switch in the hole with the "ON" position up. Remove the thin nut from the switch threaded barrel and use it to secure the switch on the outside of the panel.

5. Attach the lamp wires to the front insulated connectors (A). Attach the extension wire (B) between the two connectors. Install the 20 amp fuse (C) in the fuse holder (D) and connect the wires from the toggle switch and the rear connector together. Attach the second toggle switch wire to the ignition switch terminal.

### OPERATION

Flip the toggle switch to turn the lights on and off.

### NOTE

*THE LAMPS WILL NOT LIGHT UNLESS THE IGNITION KEY IS TURNED TO "ON".*

## MFR'S. NO. 586-ENGINE WINTERIZING KIT.

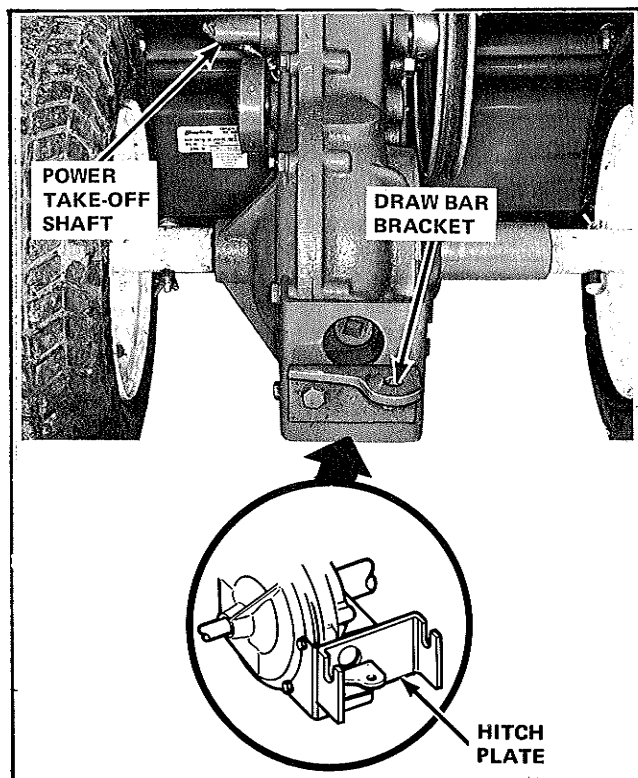
The winterizing kit consists of a baffle assembly which is clamped over the engine muffler to direct exhaust heat to the carburetor to prevent icing. The kit is automatically shipped with snow blower attachments. For use with the dozer blade it must be ordered separately.

SPECIFICATIONS	
Knives and Shaft	Number of Knives: 10
	Knife Diameter: 8 in.
	Knife Spacing: 3 in.
	Depth Adjustment: 0 to 1-1/4 in.
	Knife Material: Hardened Steel
Dimensions	Knife Shaft Material: 7/8 hex. hardened steel
	Overall Width: 37 in.
	Overall Length (Including Tractor): 72 in.
Weight (Uncartoned): 62 lbs.	

The lawn revitalizer unit is a rear-mounted rotary attachment driven directly by belt from the tractor transmission. It is used in conjunction with the rotary mower and trailing lawn sweeper (or followed by vacuum collecting). This accomplishes a complete, effective lawn conditioning process, in the following steps:

1. Mow (long grass blades interfere with other steps).
2. Raise thatch to the top of the lawn.
3. Create a series of narrow grooves which penetrate the ground surface (1/2" deep spring and fall or 1/8" deep during the dry season).
4. Remove some soil in the grooving operation and leave the sides of the grooves porous.
5. Pick up the raised thatch and remove it from the lawn, using the trailing sweeper or vacuum collector.
6. Even up the cut grass surface (mow).

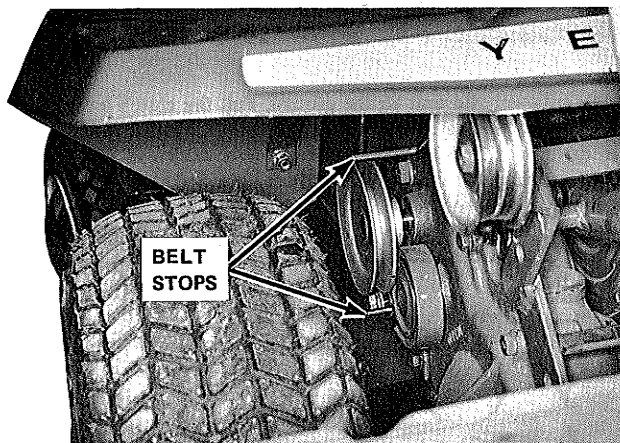
For lawn seeding, a cross-hatch grooving pattern provides an ideal seedbed.



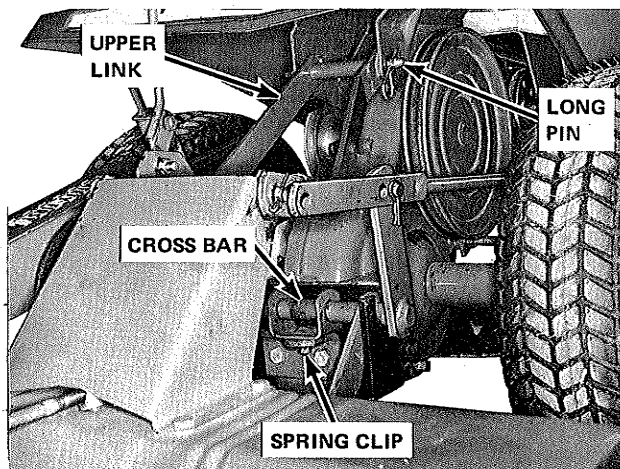
## INSTALLATION

1. Remove the drawbar bracket bolts from the rear support plate on the transmission. Place the hitch plate from the kit between the drawbar bracket and the support with the notches up. Secure with the 3/8-16 x 1-1/4 in. capscrews, nuts and lockwashers provided.

2. Remove the sleeve from the transmission power take-off shaft. Install the pulley key and secure with the setscrew provided. Install the drive pulley from the kit with the hub inward and the outer side flush with the shaft end. Install the belt stops. Remove the capscrew holding the brake band to the transmission and mount the smaller belt stop as shown, with flat washers on either side of the belt stop loop. Install the longer stop in the slotted hole of the transmission side plate, using flat washers the same way.

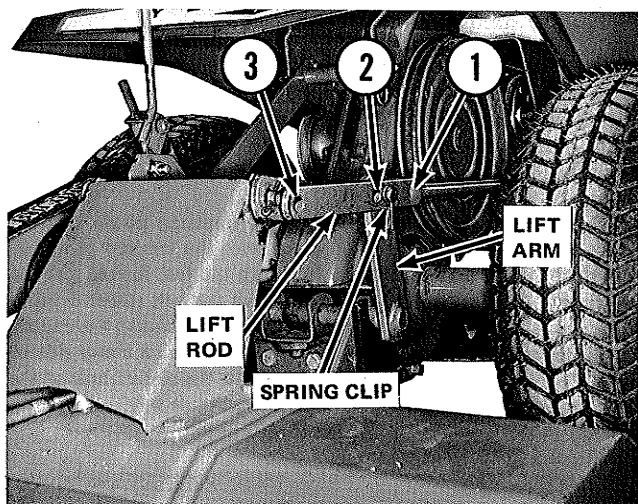


3. Position the revitalizer unit at the rear of the tractor. Lift the front bracket up and drop the crossbar into the notches on the hitch bracket. The pin on the crossbar clevis goes through the hole in the original tractor drawbar bracket and is secured with a spring clip. Mount the upper link ears on the transmission side plates using the long pin and two spring clips.

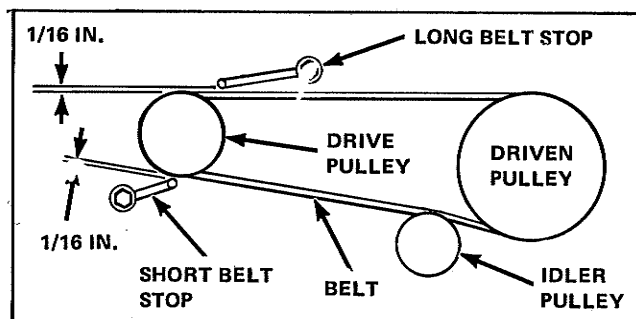


4. Install the lift rod on the tractor lift lever. Attach the flat end of the rod to the lift arm on the revitalizer. Use the proper hole for your tractor:

- Hole 1: Serf
- Hole 2: Yeoman
- Hole 3: Broadmoor

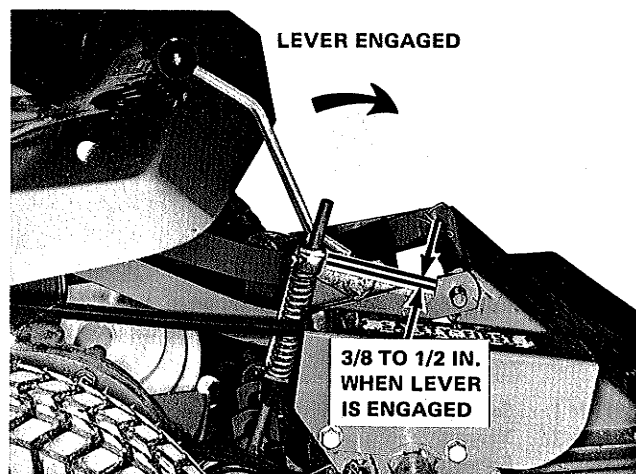


5. Lower the unit to the ground. Pull the clutch lever at the top center of the unit FORWARD to disengaged position and install the drive belt. Be sure the belt is properly seated in the pulleys. There must be 1/16 in. clearance between the belt stops and the belt when the drive is engaged.



#### ADJUSTMENTS

**BELT TENSION:** Belt tension is regulated by adjusting the set collar on the rod guide assembly. Tension is correct when there is 3/8 to 1/2 in. clearance between the set collar and the rod guide end with lever engaged. To increase tension, move the lever forward to disengaged position. Loosen the collar setscrew and slide collar down against spring. Retighten setscrew. Check tension by engaging lever. Avoid excess tension which can result in premature belt failure.



#### OPERATION

There are three important points to remember when using the lawn revitalizer:

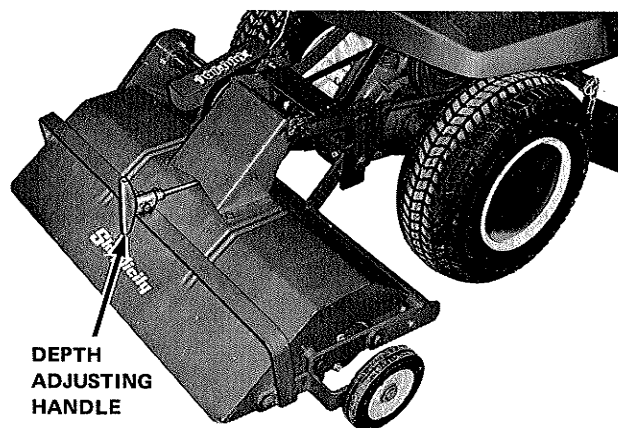
1. OPERATE ONLY IN LOW GEAR.
2. ALWAYS RAISE THE UNIT CLEAR OFF THE GROUND BEFORE TURNING.
3. NEVER OPERATE IN REVERSE GEAR.

Before starting the tractor engine, DISENGAGE the revitalizer drive by pulling the clutch lever FORWARD. Push the tractor lift lever forward to raise the unit off the ground.

Start the tractor and shift into LOW GEAR. With the engine running at 3/4 to full throttle, approach the lawn area to be worked. Engage the rotary mower drive and lower the rear unit to the ground.

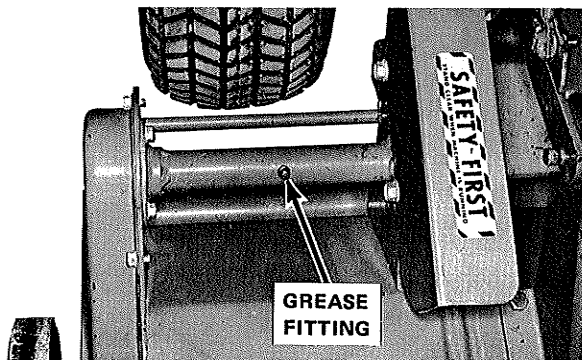
Push the clutch lever all the way to the REAR, down over center. As the knives start to dig into the turf, release the tractor clutch pedal to start forward motion.

The depth of cut of the rotating knives is controlled by the adjusting screw handle at the rear center of the housing. To INCREASE depth of cut, turn handle CLOCKWISE. To DECREASE depth of cut, turn handle COUNTERCLOCKWISE.



#### MAINTENANCE

**LUBRICATION:** The grease fitting on the bearing housing should be lubricated every 4 hours of operation. Use a good grade of automotive type grease in a standard grease gun. Apply light engine oil occasionally to all moving parts, adjusting screw threads, etc.



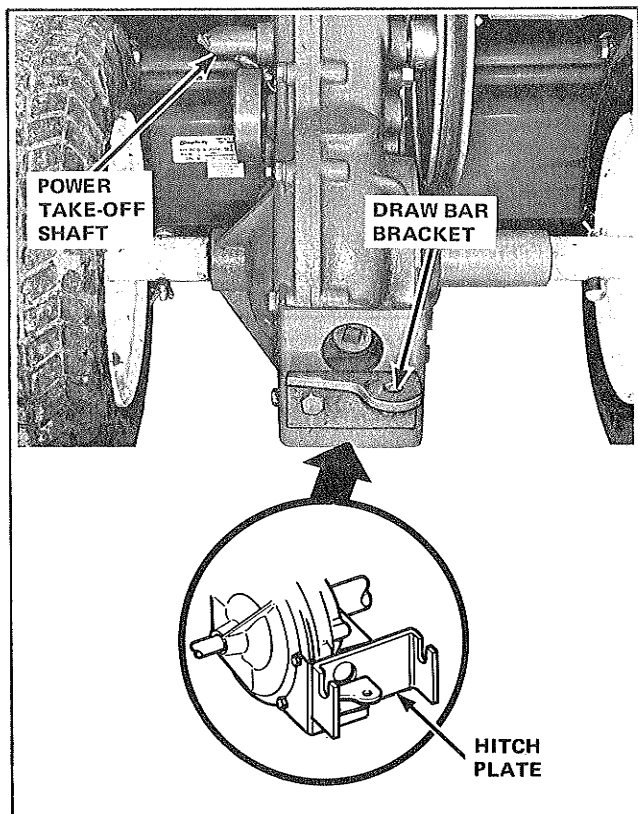
## MFR.'S NO. 628 - 30 IN. ROTARY TILLER

SPECIFICATIONS	
Tines and Shaft	Shaft Mounting: Anti-friction Bearings
	Number of Tines: 16
	Tine Thickness: 5/16 in.
	Tine Diameter: 14 in.
	Tine Material: SAE 1060 hardened steel
Dimensions	Tilling Depth: 7 in. (approx.)
	Overall Width: 31-3/4 in.
	Overall Length (Including Tractor): 77-1/4 in.
Weight (Uncartoned): 100 lbs.	

The rear mounted rotary tiller is driven by a belt directly from the transmission to the tiller roller chain drive. The forged steel tines dig down to 7 in. deep. Three depth settings are provided. The tine shaft is fully enclosed for greater safety. It is recommended that the front weight (Mfr.'s No. 466) and rear wheel weights (Mfr.'s No. 449) be installed on the tractor for best results.

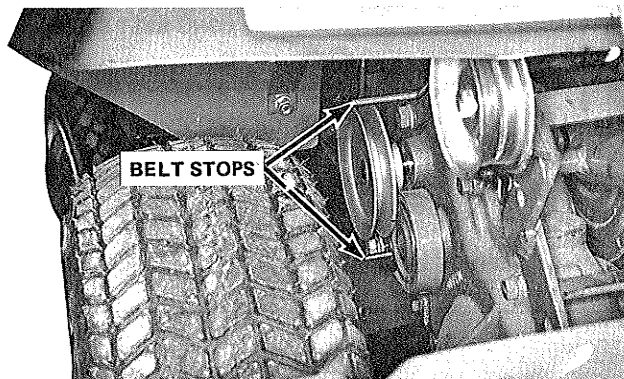
### INSTALLATION

1. Remove the drawbar bracket bolts from the rear support plate on the transmission. Place the hitch plate from the kit between the drawbar bracket and the support with the notches up. Secure with the 3/8-16 x 1-1/2 in. capscrews, nuts and lockwashers provided.

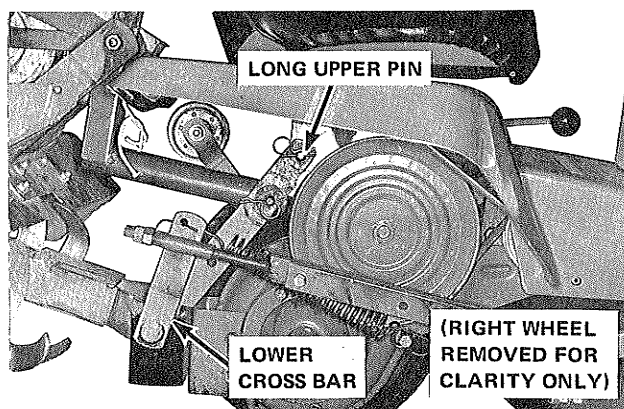


2. Remove the sleeve from the transmission power take-off shaft. Install the pulley, key and secure with the setscrew provided. Install the drive pulley from the kit with the hub inward and the

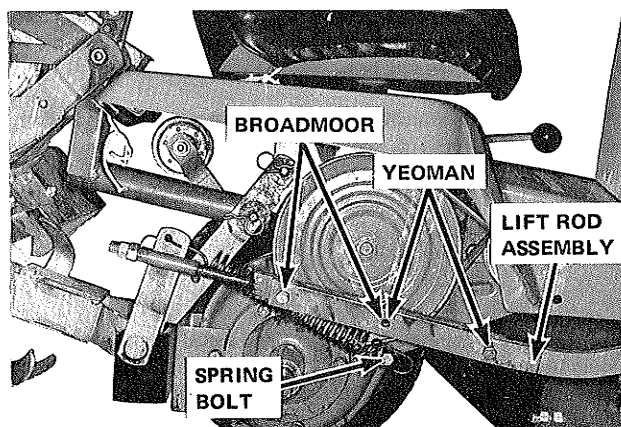
outer side flush with the shaft end. Install the belt stops. Remove the capscrew holding the brake band to the transmission and mount the smaller belt stop as shown, with flat washers on either side of the belt stop loop. Install the longer stop in the slotted hole of the transmission side plate, using flat washers the same way.



3. Install the lift rod assembly onto the tractor life lever and secure with a spring clip. Position the tiller at the rear of the tractor. Lift the tiller front bracket up and drop the crossbar into the notches on the hitch bracket. Raise the tiller to align the upper bracket holes with those in the seat support and install the long upper pin as shown.

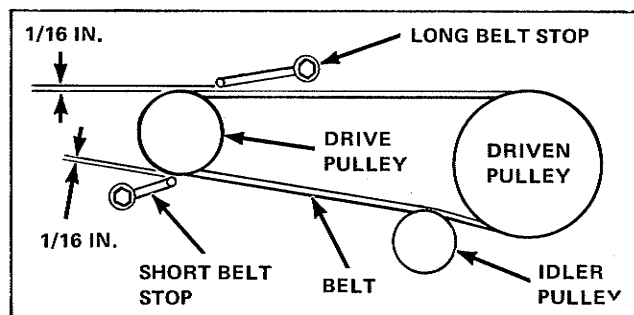


4. Install the lift rod assembly on the tiller lift arm as shown. The rear section of the rod assembly is adjustable to two positions depending on which tractor is used. Adjust to the correct length and install the rod end on the lift arm using a spring-clip. Install the long bolt and locknut shipped with the tiller in place of the forward transmission bolt for the tension spring. Hook the rear of the spring to the lift arm and the front loop over the bolt as shown.



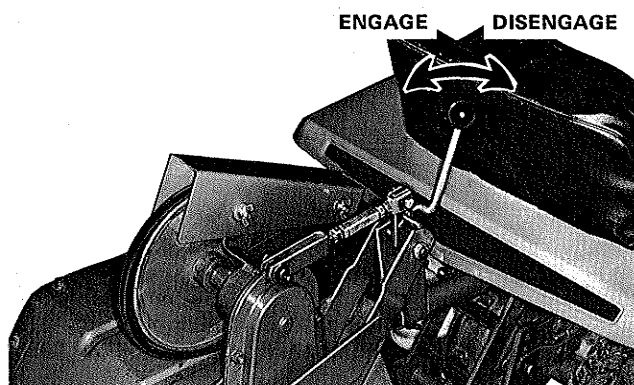


5. Lower the tiller to the ground. Pull the clutch lever forward to disengaged position to drop the idler pulley and install the drive belt. Be sure it is properly seated in the pulley grooves. There must be 1/16 in. clearance between the belt stops and the belt when the drive is engaged.



### OPERATION

Before starting the tractor engine, **DISENGAGE** the tiller clutch by pulling the lever **FORWARD**. Push the lift lever forward to raise the tiller off the ground. Start the tractor and shift into **LOW** gear. Approach the area to be tilled. Lower the tiller to the ground with the engine running at 3/4 to full throttle, engage the tiller clutch by pushing the lever all the way to the rear. Slowly release the tractor clutch pedal and move ahead. At the end of a row, raise the tiller free of the ground before turning around.

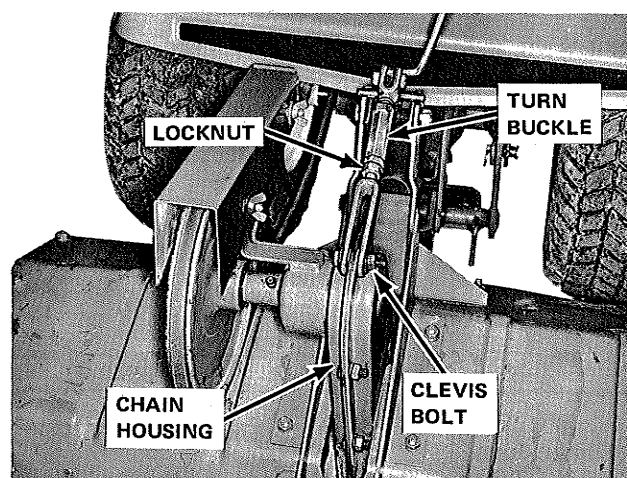


Effective use of the tiller depends chiefly on the operator. Experience will show the best methods for varying conditions. For example, if it is intended to till a sodded area into a seed bed for gardening, it obviously will require several passes over the same path to break the sod and soil into fine particles. Depending upon the nature of the soil, it may be necessary to alter the tilling depth setting on successive passes until the final depth is reached. When tilling in soil that has previously been worked, it may be possible to till to the final depth in one pass.

The tilling depth is influenced by the forward speed of the tractor. The slower the forward speed the deeper the tines will dig. **ALWAYS OPERATE IN LOW GEAR AND ALWAYS HAVE ENGINE AT HIGH SPEED WHEN ENGAGING THE TILLER DRIVE.**

### ADJUSTMENTS

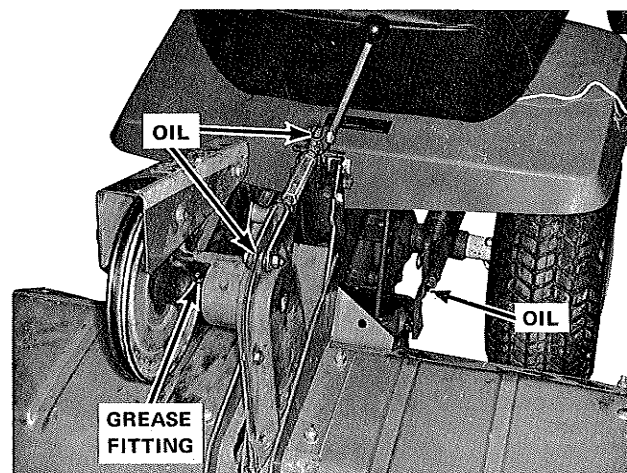
**BELT TENSION:** Loosen the locknut and adjust the turnbuckle by turning to increase or decrease the length of the link from the clutch lever to the chain housing. Lengthening the link increases belt tension, shortening it decreases belt tension.



### MAINTENANCE

Apply general purpose automotive grease to the pulley shaft grease fitting every 3 hours of operation.

Occasionally apply light engine oil to the lever pivot points, lift link and arm pivots and the mounting bracket pivot pin. **DO NOT ALLOW OIL TO DRIP ONTO THE DRIVE BELT.**



### MFR'S. NO. 990639 PROTECTIVE COVER

The waterproof, reinforced cover fully encloses the tractor for storage.





## OTHER ACCESSORIES

### MFR'S. NO. 582 - TRACTION TIRE AND WHEEL SET.

The set consists of two special tires and wheels for use in snow or on a non-turf surface, with or without chains. The wheels mount in place of the standard rear wheels.

### MFR'S. NO. 173 - MULCHER FOR 32 IN. ROTARY MOWER

### MFR'S. NO. 341 - PAIR OF TIRE CHAINS (for standard or snow tires)

### MFR'S. NO. 462 - SET OF FOUR HUB CAPS

### MFR'S. NO. 616 - SET OF FRONT HUB CAPS

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## — SIMPLICITY'S NEW EQUIPMENT WARRANTY —

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

Should warranty service be necessary, the information below should be presented to the authorized SIMPLICITY Dealer.

Customer's Name \_\_\_\_\_

Address \_\_\_\_\_

Mfg. No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Purchased From \_\_\_\_\_

Address \_\_\_\_\_

Engine Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Type No. \_\_\_\_\_

To obtain replacement parts from dealer, advise quantity, part number and description.

## LUBRICATION & MAINTENANCE RECORD

DATE PERFORMED	GREASE JOB	OIL CHANGE	TUNE UP	DESCRIPTION (OTHER MAINTENANCE)	HOURS RUN



**SIMPLICITY MANUFACTURING COMPANY, INC.**



